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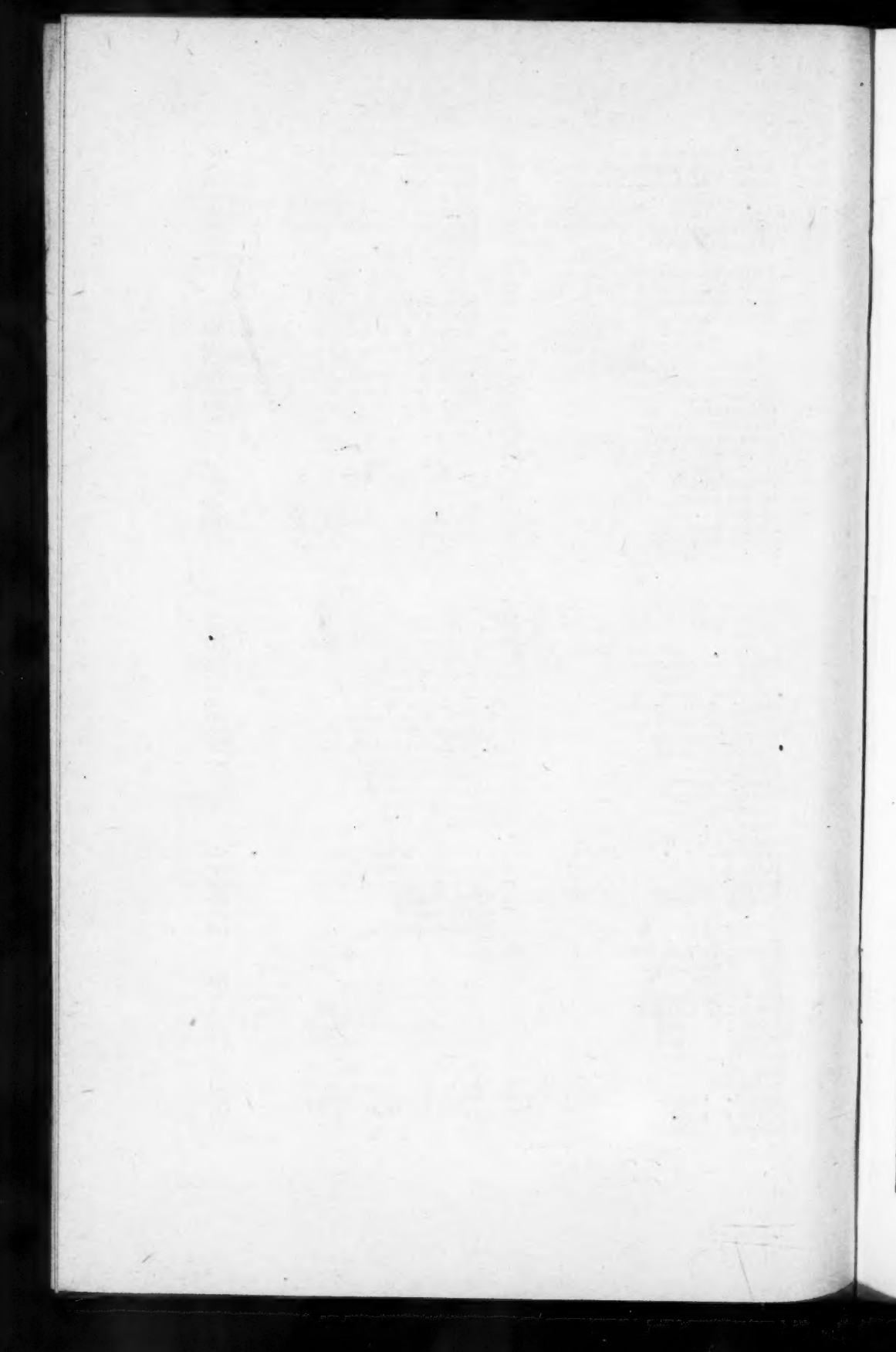
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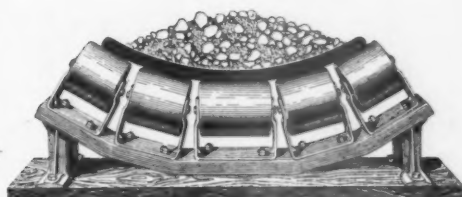
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THE TIRE VS. THE ROAD



THE BELT VS. THE LOAD

**Our Conveyor Belts
Are Carrying:**

Run o' mine ore
Primary crushing
Secondary crushing
Fine ore
Wet concentrates
Dry concentrates
Flotation products
Tailings
Stamp sand
Chats
Coal
Ashes



THE PRINCIPLE IS THE SAME

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THE MINING CONGRESS JOURNAL

FEBRUARY

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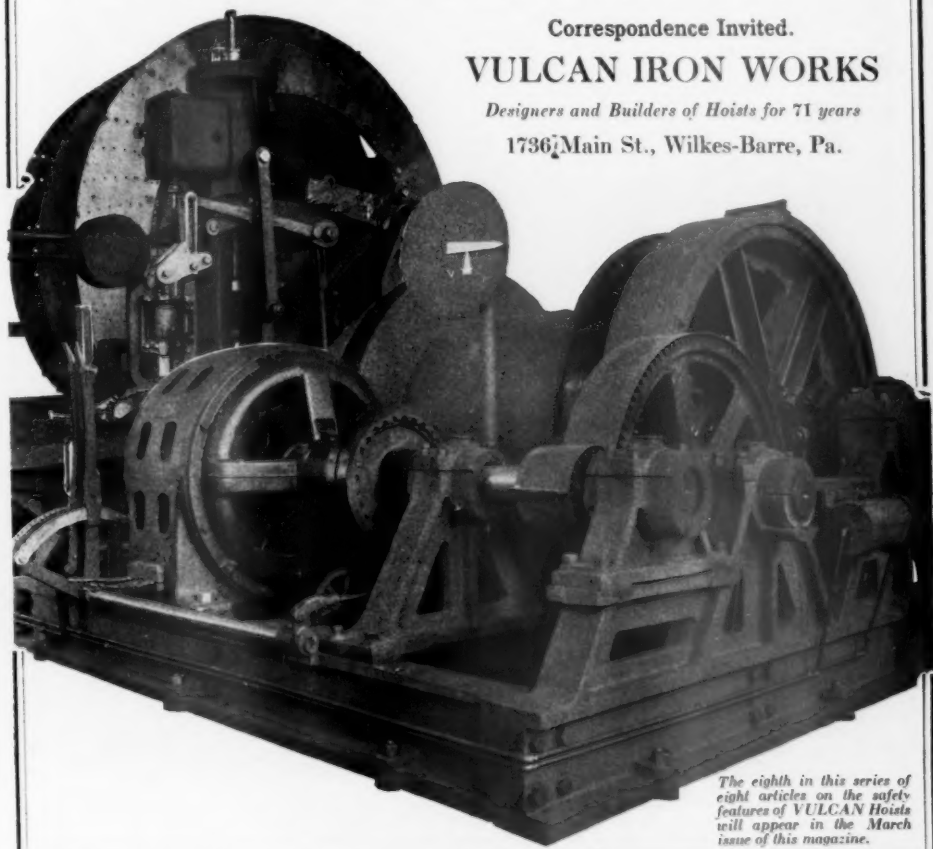
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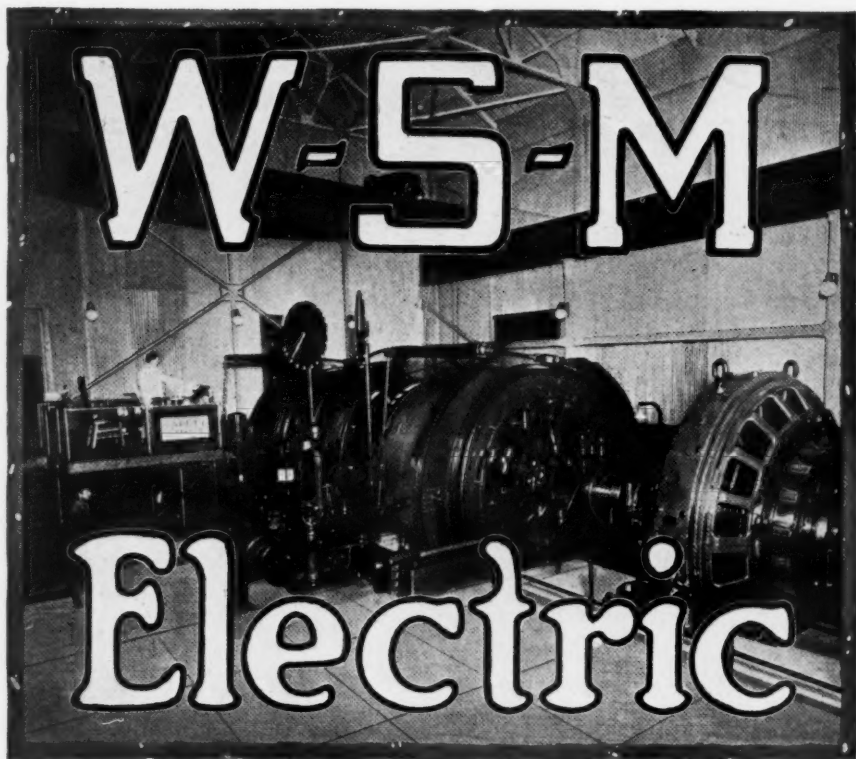
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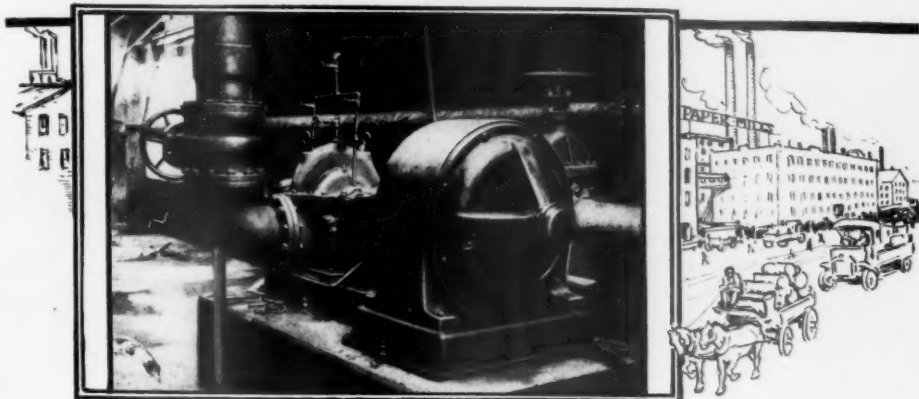
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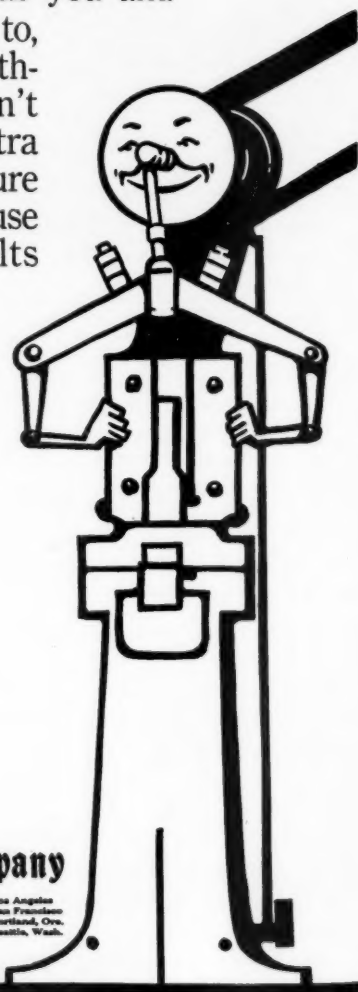
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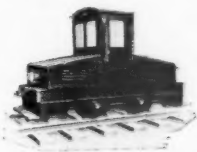
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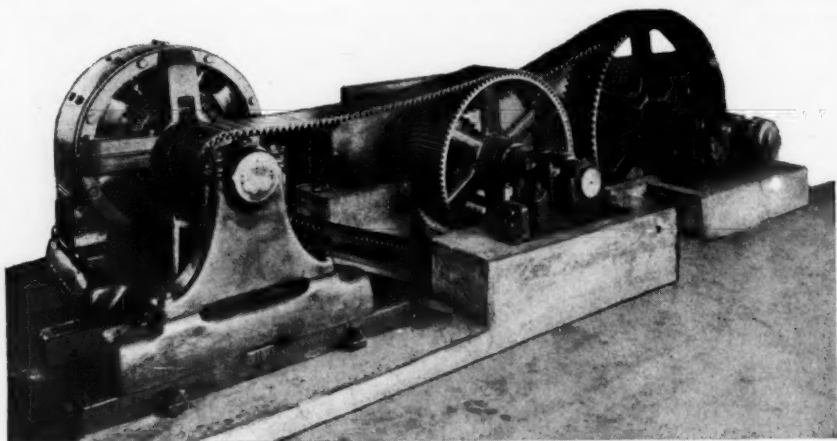
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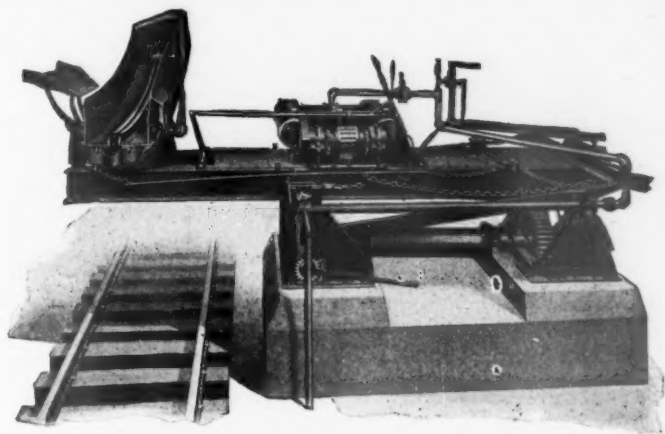
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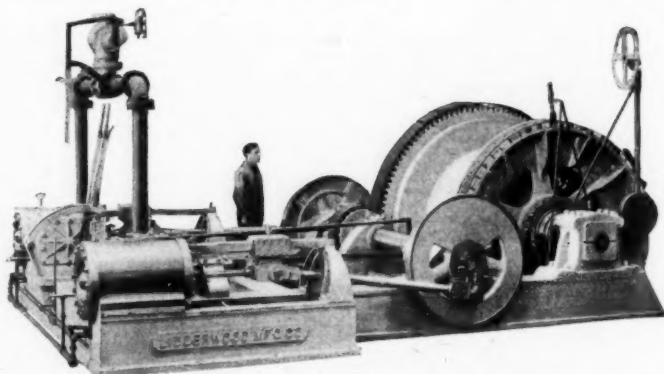
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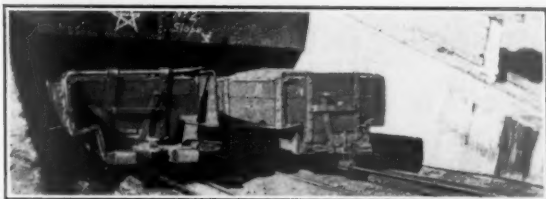
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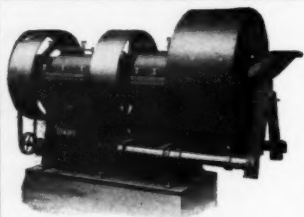
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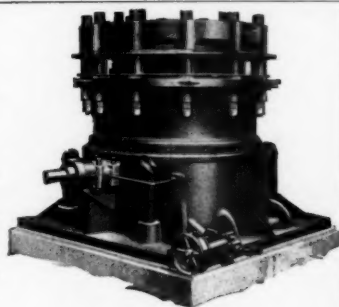
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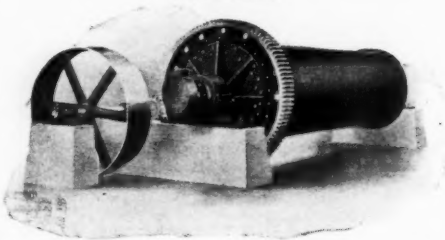
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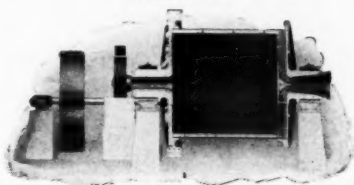
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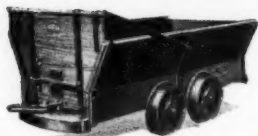
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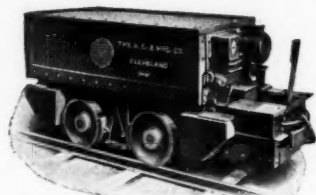


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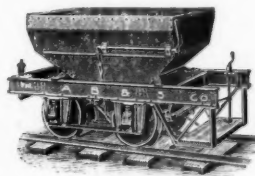
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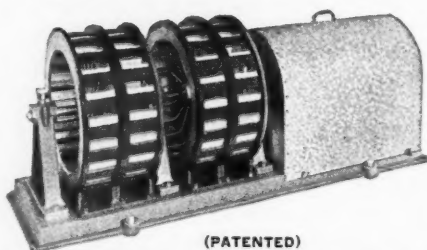
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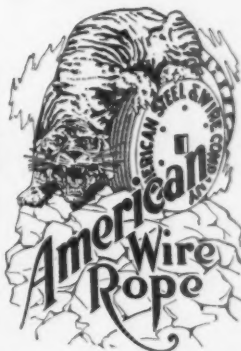
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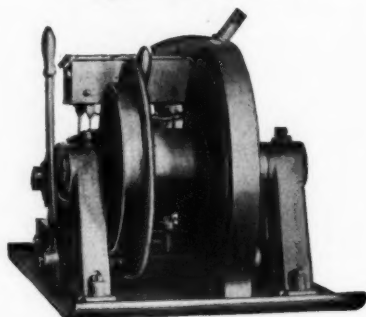
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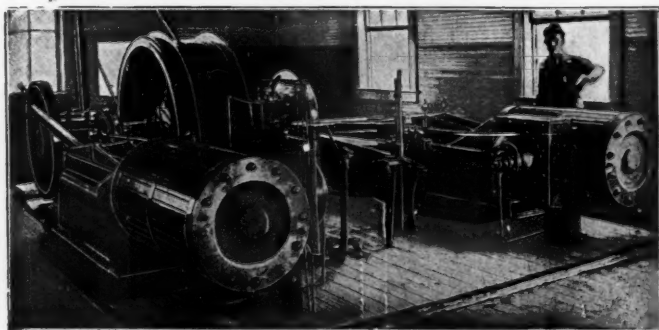
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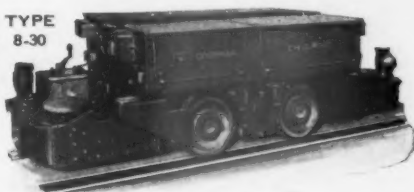
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TYPE
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THE acid test of a rock drill is its performance on the job and Waugh drill's in every instance have met this test so satisfactorily that the best mines the world over are specifying "all-Waugh" equipment.

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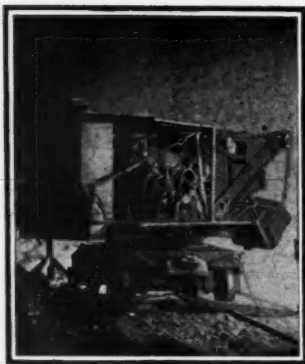
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Our many years of practical experience in the manufacture of our products, enable us to supply material of the very highest quality and efficiency.

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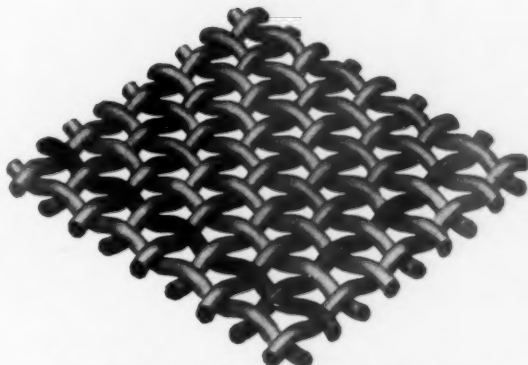
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We established a "Standard" and then lived up to it.

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Double
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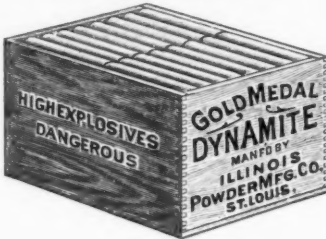
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"EXPLOSIVES"

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Dynamite

A Variety for Every Need

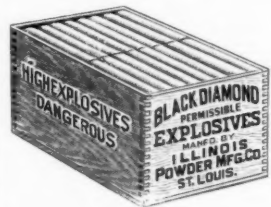


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For use in all mining, quarry
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Atlas Explosives

are daily bringing down a large percentage of the iron, copper, zinc, lead and other ores mined in America.

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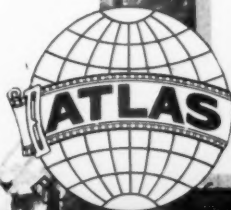
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Men of long training will freely aid you in selecting the right explosive for your particular purpose and will help you to get the most efficient and most economical results. It is a pleasure for us to do this.

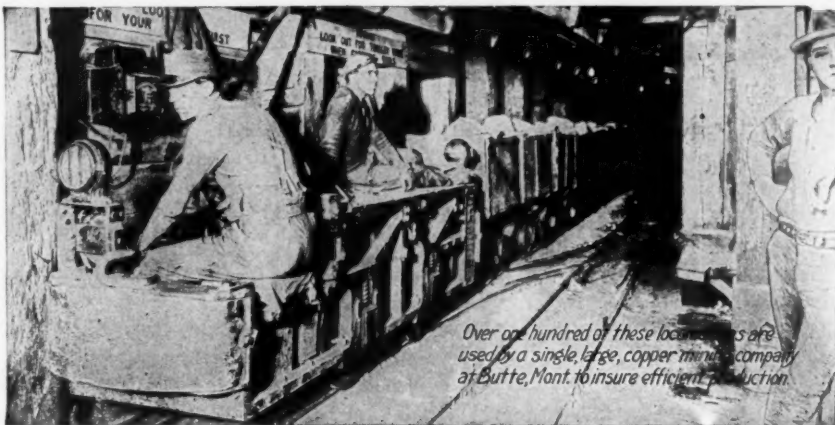
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Branch Offices: Allentown, Pa.; Birmingham, Ala.; Boston;
Chicago; Des Moines, Ia.; Houghton, Mich.; Joplin, Mo.;
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ville; New Orleans; New York; Philadelphia; Pittsburg, Kans.;
Pittsburgh, Pa.; Pottsville, Pa.; St. Louis; Wilkes-Barre.

A detailed black and white illustration of a mine's interior. Several workers in hard hats and work clothes are visible, some standing and others working with equipment. Large cables or hoses run across the floor of the mine. The walls are rocky and uneven, and the overall atmosphere is one of industrial activity.

for ore mining



Transportation As It Affects Production

Inefficient haulage often proves itself a costly handicap. It retards progress in a large degree throughout the entire organization from the mine to the mill man.

A congestion of loaded cars and a scarcity of empties offer little encouragement for a miner to turn his efforts toward a maximum production.

The Baldwin Westinghouse Barsteel Locomotive

with its great reserve of power and strength has in many instances been installed where such conditions existed. The uninterrupted and powerful service afforded by this locomotive has in such cases effected an immediate increase in production. From the smallest to the largest types this locomotive is of the greatest mechanical and electrical strength.

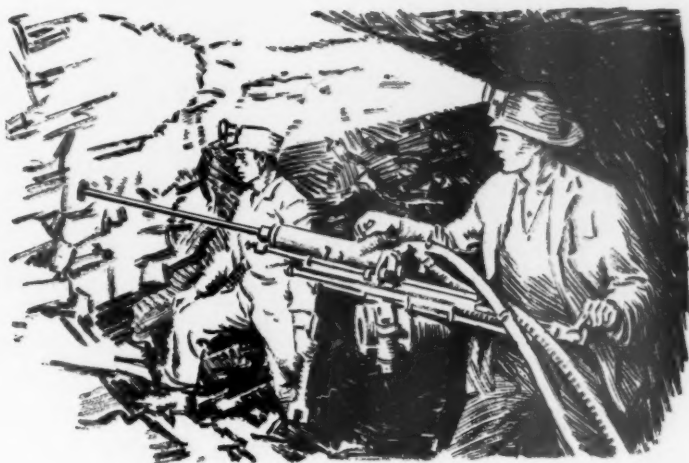
Thousands of Barsteel locomotives are today enabling their owners to secure the maximum of production from their investments.

Write to either company

The Baldwin Locomotive Works
Philadelphia, Pa.

Westinghouse Electric & Mfg. Co.
East Pittsburgh, Pa.

BARSTEEL



Use Hercules Explosives in Your Mine

RECORD ore production depends in a large measure upon using explosives that exactly fit the conditions under which you are working. Your blasting problems are many but they can all be solved by using one or another of the many formulas and strengths of Hercules Dynamite.

In the mines where are produced copper, zinc, coal, iron, aluminum, salt, and sulphur Hercules Dynamite has helped hundreds of miners to increase production and cut costs.

Your own knowledge of local conditions will probably enable you to choose the grade of explosives best suited to your needs, but we are always glad to advise on this when asked, or to demonstrate the efficiency of Hercules Explosives when the occasion requires it.

HERCULES DYNAMITE



HERCULES POWDER CO.



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Marcus Patent Coal Tipple



ENGINEERS AND CONTRACTORS FOR

Complete Coal Mining Plants
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Coal Re-screening Plants
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THE ROTARY CAR- DUMPER

At the Northwestern Mining & Exchange Company's
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Loaded Trip Ready to Enter Pump

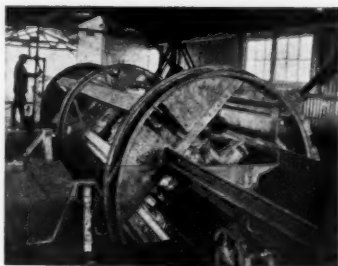
Enables use of more substantial solid-body cars, which last longer, require less repairs and prevent leakage of dust and coal along the haulage.

Saving of labor; saving of maintenance expense, and increase of output, which means a larger production with same number of cars.

Car-Dumper & Equipment Co.

Grand Crossing,

Chicago, Ill.



Completing the Dumping and Cars Leaving the
Dump

Announcement

THE undersigned take pleasure in announcing that The American Metal Company, Limited, have acquired by purchase the entire business of L. Vogelstein & Company, Inc., as of January 2nd, 1920, and that Mr. L. Vogelstein has acquired a substantial interest in The American Metal Company, Limited. Mr. L. Vogelstein has been elected a Vice-President of The American Metal Company, Limited, and will take an active part in its future management.

The entire organization of L. Vogelstein & Company, Inc., has been taken over by the Metal Company, and all contracts and engagements of the Vogelstein Company extending beyond January 2nd, 1920, will be for account of The American Metal Company, Limited.

**THE AMERICAN METAL COMPANY, Ltd.
L. VOGELSTEIN & COMPANY, Inc.**



A Full Day Worker Every Day

*Economical and efficient,
Asking little, giving much,
On the job day in—day out.*

**It is the Gathering
Locomotive equipped with**

The "Ironclad-Exide" Battery

The "Ironclad-Exide" Battery is the most serviceable locomotive battery built in this or any other country.

It is the one and only battery that combines the four essentials needed in a locomotive :

1—Power 2—Ruggedness 3—Efficiency 4—Long Life

These facts are proved by 8 years of hard mine service; four large companies alone use 150 "Ironclad-Exide" batteries in their fleets of battery locomotives.

The "Ironclad-Exide" Battery is built by the largest manufacturer of batteries in the world; back of it is thirty-two years of experience.

Here is a worker you can always depend upon. Why wait? Write today for a copy of "15 points" of "Ironclad-Exide". Get the facts.

THE ELECTRIC STORAGE BATTERY CO.

The largest manufacturer of storage batteries in the world

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Special Canadian Representatives: Chas. E. Good Co., Toronto and Montreal.

Batteries are made by this Company for every storage battery purpose

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THE NAME OF A SUPERIOR ROCK DRILL SERVICE

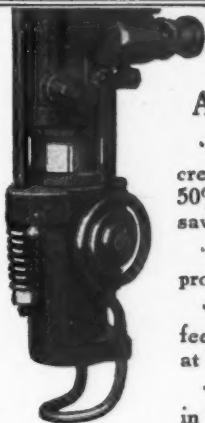
Design

It is self-rotating, self-lubricating, and is an all steel drill. It uses the non-freezing Butterfly Valve, a convenient steel holder and an effective hole cleaning device. It uses air or steam.

Application

Unmounted for shaft sinking, bench work, hitch cutting, ditch work, trimming, block-holing.

In the handy Jackhammer mounting, for drifting, tunneling and stoping.



Bulletin
No. 4321

Accomplishments

"Doubled the output, increased the men's wages 50% and made an actual saving of 9c per ton."

"Increased shaft sinking progress 25%."

"Drilled from 300 to 400 feet of hole per 10-hour day at less than 5c per foot."

"Sunk 80 ft. 7 x 14 shaft in 25 days operating 2 shifts per day."

"Two Jackhamers averaged 150 ft. of drift per month—2 eight-hour shifts per day."

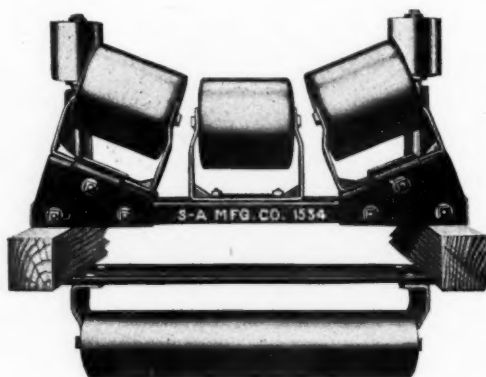
Ingersoll-Rand Co.

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Why does your plant shut down while you are required to replace broken carriers?

S-A UNIT CARRIERS

offer a successful solution to these points and will pay you to investigate.

The **UNIT CARRIERS** will operate for six months without attention. After six months' continual service we recommend inspection and lubrication if necessary.

S-A UNIT CARRIERS have operated successfully for a period of from two to three years with absolutely no attention whatever.

If you are interested in making your Belt Conveyor more dependable and more economical to operate, you should confer with our engineers

STEPHENS-ADAMSON MFG. CO.
AURORA, ILL.

THE MINING CONGRESS JOURNAL

Official Organ of the American Mining Congress

A PRELIMINARY REMEDY FOR H. C. L.

Outside the question now involved in the Cummins-Esch Bill and a part of the propaganda which is now being extensively carried on is the question of a further increase in basic freight rates.

It was shown in the January number of the MINING CONGRESS JOURNAL that the rate now prevailing is 51 per cent higher than the rate which prevailed in 1913. It is now being urged that the railroads should be permitted to make an advance upon the present rate of 25 per cent which will mean approximately 88 per cent increase over the rates of 1913.

MINING CONGRESS JOURNAL does not believe that this rate should be established until every other recourse has failed through which the railroads shall be in position to render efficient service to the business of the country and to make such profits as will attract the new capital required for extensions and betterments of railroad facilities which will permit the satisfactory handling of the transportation business of the country.

MINING CONGRESS JOURNAL believes that the standard return should be guaranteed by the Government to the railroads for such length of time as will permit them to fully answer the question as to whether the present rates are sufficient or whether additional rates will be required to meet the country's transportation requirements.

A freight rate once established is most likely to become a permanent rate with only such changes as are required to meet local conditions. The freight earn-

ings of the railroads of the country in the year 1918 amounted to \$1,434,723,161. During that year, the tonnage furnished directly to the railroads by the mining industry of the United States, amounted to 57.5 per cent of the total. This does not mean that 57 per cent of the earnings of the railroads were paid directly by the mining industry because for obvious reasons mining products are carried at a cheaper rate per ton than most other commodities. However, it is true that indirectly the mining industry pays a very large amount of the freight on commodities carrying higher rates.

A 25 per cent increase in freight rates is now being proposed and actively urged by the railroads, which means an increase of more than \$150,000,000 annually to be paid by the mining industry. If this increase is necessary in order to permit the railroads to operate efficiently and satisfactorily, then it is up to the mining industry to buck up to the line and pay the additional rate, but if it is at all possible for the railroads to be tided over this present emergency without the increased rate, it is altogether for the interest of the country at large that this shall be done.

It is universally considered that there must be a point beyond which high prices cannot go and that sooner or later the trend of prices must be downward. Unless prices in foreign countries increase as rapidly as do our own, there must be a return to lower levels, else this country's products will be barred entirely from foreign markets. It is safe to assume that European countries, in order to meet their war obligations, will be required to economize and to produce as

cheaply and efficiently as possible. A trend toward lower prices would be a great boon to the country whenever it can be initiated without too great disturbance to our financial system.

What better point can be found in which to initiate a downward trend of prices than in some great enterprise in which the Government can guarantee losses, spreading these out over the people in the form of taxation.

MINING CONGRESS JOURNAL believes that the place to begin is with the railroads; that this burden can be assumed by the people as a whole better than by any independent industry. The public has already assumed a deficiency created by railroad operation. It can go a little farther if necessary.

MINING CONGRESS JOURNAL submits that there is no place where a halt can better be called to the present dangerously increasing trend of prices than with the railroads. No other industry could possibly receive government aid. No agency so, quickly adds its expense to every dinner pail and every breakfast table. Let us cease joking about the high cost of living. Let us start at the only feasible place where, as a nation, we may begin a movement toward normal prices, toward a condition which must be brought about by intelligent foresight or by the cruel logic of an industrial panic.

Let the leading industry of the country, with the government at its back, lead the way to normal conditions.

WILL AMERICANISM WIN?

Henry J. Allen, Governor of Kansas, in a message to the legislature of his state, in an extraordinary session on January 5, called attention to the heartlessness and callous indifference of the striking coal miners who, under the leadership of President Howat, of the Kansas Federation, tied up the mines of that state simultaneously with the tying up of all other bituminous fields in the central region. The Governor, like most westerners, is a "direct actionist." He

saved the state from the coal famine through the voluntary services of inexperienced, untrained, but loyal citizens. He forced a receivership and took charge of all of the mines in his state, and in his address to the legislature he recited the cold hard facts in the history of the contest. He appealed to the legislature to consider a law by which the ordinary methods of dealing with the labor situation might be superseded by a "Court of Industrial Relations." He outlined a strong dignified tribunal invested with the power, authority, and jurisdiction to hear and determine all controversies which might threaten, injure, delay or suspend the operation of the state's industries; and declared it to be the duty of all persons engaged in such industries, whether as employers or workers, to see that the state shall be supplied at all times with the necessities of life. He proposed that the Industrial Tribunal should, on its own initiative or upon complaint registered by citizens, investigate and determine the merits of any controversy with power to prescribe rules and regulations, hours of labor, working conditions, and minimum wage. The bill proposed by the Governor provided for the incorporation of unions or associations or workers, recognizing to the full the right of collective bargaining, but establishing these rights under contractual responsibility. He proposed a law that would make it unlawful for employers to delay or suspend production or transportation, or to discriminate or discharge any employe because of any participation by that employe in proceedings before the Court. The Governor called the legislature's attention to the fact that such a law and court would prevent strikes and lockouts and boycotts, and insure the people at all times an adequate and stable supply of the necessities of life. In short, Governor Allen proposed that Kansas should be run along purely American lines.

The Governor's proposal became a law. At first the plan met with active opposition, but this quickly changed to support on the part of a large number of laboring men and leaders, and Governor Allen

firmly believed that he had succeeded in establishing the principles of right and justice in his state.

But Mr. Howat, so-called labor leader and recognized radical, and president of the District Branch of the U. M. W. of A., planned differently, and when the bill became a law, even before there was an opportunity to appoint a court and set the machinery in operation, some of the bituminous miners of Kansas left the mines and an effort was made to declare a general strike. The strike, as a strike, lasted just one day, but the spirit of contempt of law remains in the minds of Kansas radicals. Labor, generally, quickly saw the justice of the new law.

The Governor of Kansas, backed by a legislature which had the backbone to pass a reasonable and just measure for the protection of worker, employer and public, does not intend to allow Kansas to be imposed upon further, and in declaring his line of action Governor Allen in simple, direct and positive phraseology sounded a warning that while an individual had a perfect right to strike as a protest against the passage of the law, he would thwart any conspiracy exercising the sovereign power of Kansas. Had the coal strike continued Governor Allen was ready to teach Mr. Howat and his followers a much-needed lesson.

The principle involved is similar to the issue in Colorado, where compulsory arbitration has long been established under statute. The American Federation of Labor has long held up to the public the nightmare of the injustice being practiced under the Colorado law, but since compulsory arbitration was introduced it is a notable fact that there are fewer labor disputes in Colorado.

THE GOLD QUESTION

For more than two years the MINING CONGRESS JOURNAL has been calling attention to the serious danger which threatens this country on account of the decreasing output of gold, caused by the ever increasing costs of production.

A very careful analysis made early in the year 1918 showed the increased cost

of gold production at that time reached 57 per cent above the cost in pre-war times. The result of this economic pressure has been, as we then predicted, to force the closing down of a very large number of gold mines and to put an almost unbearable burden upon those mines in which the grade of ore was high enough to permit operation. We then predicted that the gold output for the year 1918 would fall below 75 millions of dollars and that it was safe to assume that the production of 1919 could not possibly be in excess of 65 millions of dollars. These estimates were entirely too conservative in that the production of gold in the United States was but 68 millions of dollars in 1918, and but 58 million dollars in 1919.

In the meantime, the use of gold for industrial purposes has largely increased. We are still facing the same condition—a still further decrease in gold production and a still larger increase in the use of gold for industrial purposes. The amount of credit money, based upon our gold reserve, has so increased as to have almost reached the legal limit, the balances are increasingly against us in our trade with the Far East, and there seems little prospect that any considerable amount of gold will flow into this country from Europe.

So many gold mines have already closed down that it will take several years, even with the stimulus of a satisfactory premium, before their outputs can be made available on the former peace-time basis. Practical mining men understand the reason. A mine, once abandoned, deteriorates so rapidly that it requires years to put it back again in workable condition. Many mines fill with water, timbers rot and workings cave, making them entirely unreclaimable.

To develop a new mine requires years of patient operation, even though the location and extent of the ore bodies are well defined. In most instances, undeveloped ore bodies are unknown ore bodies, and it is only after a large amount of development work, most of which has been done in barren ground, that a mine is put in position to produce regularly. It will take years to put the gold in-

dustry in the condition that it was in in 1915. The quicker this process is begun, the better for the country. The longer it is delayed, the greater the danger to the country, the longer the time required for recovery, and the more bitter the lesson.

THE STEEL STRIKE IN COLORADO

One of the most interesting chapters in strike history as tending to show the persistency with which organized labor attempts to force the adoption of its edicts is found in the recently published report of President J. F. Welborn, of the Colorado Fuel & Iron Company. In this report Mr. Welborn describes to the stockholders and employes of his company, the experiences of the company during the steel and coal strikes. The steel strike was called without warning at a time when the best of feeling existed between the Colorado Fuel & Iron Company and the majority of its workers. The Industrial Relations Plan (the Rockefeller Plan) then in operation at the plant of the C. F. & I., provided for the right of collective bargaining through unions of employes, but not through such unions as divisions of national organizations. The company had very carefully refrained from either discriminating against, or discharging employes because of membership in unions, no questions being asked so far as the company was concerned. The eight-hour day and the six-day week had been in effect since November, 1918. There was no 24-hour shift; wages paid were as high as those paid in similar operations elsewhere, and advances had aggregated 131 per cent since 1916. Other qualifications being equal, the rule of seniority applied in maintaining, increasing and reducing the working force. When the strike committee, on September 18, presented the strike demand ordered by William Z. Foster, national secretary, based on twelve points, the only actual questions not already covered by existing conditions were technically: "Double pay for over-

time, Sundays, and holidays; the check-off system of collecting union dues, and the abolition of company unions;" which, when boiled down to one point, meant the closed shop and the union system.

The day previous to the presentation of the strike order, September 17, forty-two employes of the company had met together in the usual manner and discussed in a friendly way the business of the company. There was no suggestion of impending trouble. Twenty-four hours later those employes were called together and the injustice of the demands discussed. At the end of a four-hour conference it developed that the long and technical verbiage surrounding the supposed twelve points to be discussed amounted to nothing more or less than camouflage to cover the demand of the Steel Workers' National Organization for the adoption once more by the C. F. & I. Company of the old form of union domination or closed shop. There was no fault to be found with the treatment of the men, with the living or working conditions, and hours or the wages. It was just a question of union or nothing. The result the public well knows. The Colorado Fuel & Iron plants were closed down along with other steel plants.

Mr. Welborn's report of the coal strike shows a most interesting result of the Rockefeller Plan of Industrial Relations. When the strike was called on November 1, the company immediately asked for mass meetings of the miners at the various camps under control of the company. The wives of the miners attended and were given opportunity to vote separately on the proposition as to whether they did or did not favor the strike of the men. The vote of the women was unanimously in opposition to the strike at every camp. The men were given opportunity to cast secret ballot for or against the strike. Except for two camps there was an overwhelming majority against the strike, but the issue was forced and the United Mine Workers had given out the word that "if the Rockefeller interests do not come through it will be a warm time through 1919 and into 1920" and "we will not give up until

the Colorado Fuel & Iron Company gives us a closed shop."

Fearing violence, and at the request of hundreds of their own miners, the company asked the Governor of Colorado for state troops, and as soon as these troops were placed in advantageous points for protective purposes the majority of the miners returned to their work at the mines. The company refused to re-employ twenty radical miners who were known to have threatened violence to the men who returned to work. Because of this the Colorado miners were again called out on strike November 21, the public being informed that the company had refused to re-employ several hundred of its workmen. The thirty-day notice of a strike required by the Colorado State law called the Court into action, and the issue was investigated by the State Industrial Commission. It was admitted at the investigation that the strike was called without a vote of the workmen or action of the executive board.

The outcome of the situation in the C. F. & I. Co.'s plants seems to be the strengthening of the Industrial Plan as a means of industrial peace.

REASONS FOR SOCIAL UNREST

Whiting Williams, Director of Personnel of the Hydraulic Pressed Steel Company, of Ohio, has just returned to his desk after having spent months as a floating laborer in various steel mills, coal mines, and metal mines. He classifies the principal thoughts in the minds of the worker as "the preeminent importance of holding a job; the danger of being forced into joblessness; and a deep seated antipathy to continually being held in ignorance of the business end of his employer's establishment as to the plans, purposes, and ideals of his employer.

"These three basic thoughts," says Mr. Williams, "create a good soil for the arguments continually injected into his mind by agitators and radicals. The worker is continually told that his employer knows and cares nothing about him; that the profits of the business

which he is helping to maintain are enormous and that there is nothing in common between the worker and the employer except the pay check which ultimately passes between the two. The lack of interest on the part of the employer results in a lack of interest on the part of the employee, and it becomes, so far as the work is concerned, merely a matter of getting as much of the profits as possible for him to secure either by arbitration, force, or otherwise."

The most costly result of this growing misunderstanding is, according to Mr. Williams, a spirit of inefficiency which is a direct result of the belief in the worker's mind that his employer cares nothing for him; therefore he should not give any particular thought either to efficiency in service or in quality or quantity of production. Mr. Williams fraternized freely with all classes of labor, became one of the men and learned much of interest to every employer. "The longer I worked in the mills, the less I did," said Mr. Williams, "because of the underground instructions and taps on the shoulder with such behests as 'lots of time,' 'take it easy,' 'don't kill yourself,' etc."

The history of this investigation by a man whose life is devoted to a study of the reasons for social unrest will be read with a great deal of interest by employers, who may find considerable food for thought and material for study in their present day plans for the reconstruction of their producing organizations.

TRADE RELATIONS WITH RUSSIA

Mr. Martens, who styles himself as Ambassador of the Russian Soviet Government boastfully stated to a Congressional investigating committee a few days ago that the Soviet Government was no longer endeavoring to proselyte in other parts of the world, nor was it tending to create soviet sentiment among other nations. He made significantly, but characteristically boastful, statements: one, that the Soviets were now so strong that they did not need to consider

other peoples, but were strong enough to fight the world; the other, that the Soviet Government had in its treasury nearly a half billion of dollars in gold which it wished to spend in commercial transactions with other nations upon a proper basis.

About the time of Mr. Martens' public boasts of Soviet strength, a secret conference, said to have been composed of forty-five leading manufacturers, importers and exporters of the United States, was called in the city of Washington for the purpose of organizing an American movement to bring pressure to bear on the Government to force the issuance of trade licenses between American manufacturers, importers, and exporters and Soviet Russia. The American Commercial Association to Promote Trade with Russia was launched, but not all of the business men present agreed with the organization and many of them did not ally themselves in membership. The *New York Times*, in a fearless and well-worked-out statement of its investigations, brings out the fact that Dudley Field Malone, counsel for Lenin's representative during the senatorial investigation, was present at this private conference, and that the friends of the Soviet movement endeavored to show that the re-establishment of commercial relations would not be a recognition of the Soviet Government, but would in fact be with the justly famed Cooperative Societies of non-Soviet Russia. The enthusiasts back of the movement pointed out that Germany is now dealing with Russia on a large scale; that there is a vast accumulation of hides and leather in Russia, enough, if imported into the United States, to reduce the price of shoes by 50 per cent; that there is a large supply of platinum and other minerals already mined, ready for shipment; that from the Ukraine it is possible to get vast supplies of flax, grain, and food products. The meeting had been sponsored by the head of a corporation which already has a huge order for printing presses and which it is now unable to ship to Russia. Those who joined the movement, while admitting that their ac-

tivity was based upon the expected profits from the trade, talked most enthusiastically of "American interests" which they seemed to fear would not be properly safe-guarded unless trade with Soviet Russia is quickly established. The camouflaged discussion as to dealing exclusively with the Cooperative Societies was not unanimous, and there were a number present who insisted that this Government immediately reopen commercial relations direct with the Soviet Government, which sentiment was, no doubt, not unpleasing to the attorney of "Ambassador Martens." Mr. E. E. Pratt, former chief of the Bureau of Foreign and Domestic Commerce, now an active business man in New York City, withdrew from the conference after calling the attention of the gentlemen present to the danger of political significance being given to such a movement at a time when sentiment favorable to the Soviet movement is rampant in the United States. The *New York Times* in the following editorial brings out some very interesting points which should be considered not only by the State Department but by the exporters themselves before any final decision is made on the question involved:

All the pro-Bolshevik forces here will be sympathetic with their demand; and while there is no reason to doubt their assurance that they have no concern whatever in the form of the Russian Government, the fact remains that here is business interest thrown into the scales for the benefit of those who want peace with Lenine.

These exporters expect the Soviet Government to deposit large quantities of cash in American banks to pay for the goods ordered. Doubtless payment will be in gold, of which Mr. Martens says his principals have nearly half a billion dollars. Most of that belonged to the old Russian Government, and recognition, explicit or tacit, of Lenine, would imply recognition of his right to the money. But a good part of it is the Rumanian gold reserve which was deposited in Russia when the Germans approached Bucharest. If American exporters shipped goods to Russia and took their pay in gold, only to find the Rumanian Government beginning proceedings in our courts for the return of that gold to its owners, the transaction might not be wholly profitable. American courts have never taken a favorable view of the theory that theft

creates title, and theft is Lenine's only title to the Rumanian gold.

The greatest point for the consideration of the American people is whether or not this nation can afford to deal with a renegade government, the history of which is built upon murder, rapine, and theft, and whether it would not be better Americanism for the exporters and importers of this country to confine themselves to the legitimate fields which can so easily and honorably be developed among the Allied nations, and neutrals, and our Spanish-speaking sister nations to the south.

And as if to force the issue to a conclusion the Soviet "government" now announces that the "Cooperatives" are under Lenine domination and that no dealings will be allowed with Russia unless a general armistice is ordered. Thus, Rumania's stolen treasure may fail to reach our shores.

NOT A BOGIE MAN

Glenn Plumb is not a bogie man. He is an alert, far-sighted misguided enthusiast who has already convinced union labor and some unorganized workers that he has a real idea. Of course Mr. Plumb miscalculated when it was attempted to cram the Plumb plan and the threatened general strike on the railroads down the throat of Congress on the same day. It is not in accord with the custom of the Congress of the United States to allow any group of men to dominate the activities of that august body. When Acting President Jewel, of the Railroad Brotherhoods, openly threatened that unless the entire revolutionary program of the Brotherhoods, including the Plumb Plan or some other form of nationalization, was put through by Congress, the railroads would "be tied up so tight that they would not run again," he made the mistake of miscalculating the temper of the American people; and as a result of the blunder the Plumb Plan has been resting peacefully in the committee pigeon hole, while public sentiment has been quietly but,

firmly developing against any form of nationalization of industry.

Mr. Plumb, however, like Banquo's ghost, will not down, and he recently started a campaign again backed by union labor and a few radical thinkers outside the realm, looking to the final "Plumbing" of all industries in the United States.

Organized labor has never for one moment fooled the public. The radicals in the ranks of labor intend to nationalize every industry in the United States if it can be done. It is a fight to a finish between what is now an unorganized majority and an organized minority, but the MINING CONGRESS JOURNAL believes that the unorganized majority will awaken to the fact that it must become an organized majority.

Mr. Plumb is not a bogie man, neither is he merely a scarecrow set up by his group to agitate the American people, and if the industrial leaders of the United States do not seriously consider the industrial situation and act intelligently, Mr. Plumb and his plan will occupy a very important place in the American eye within the next few years.

THE COWS SHOULD BE CONSULTED

A dangerous fallacy which affects many half baked statesmen is that which leads to the conclusion that every industry which serves a public purpose should in case of mismanagement be declared a public utility and brought under government regulation.

The latest manifestation of this imbecility was shown in a message to the New York State legislature by the Governor of that state. This message accompanies two reports upon the milk situation in that state, one by an unofficial commission appointed by the Governor and headed by ex-Governor Martin H. Glynn and the other by a voluntary higher-price milk commission of the City of New York. Referring to these reports, Governor Smith says, "Both of these reports speak of the necessity on the part of the state of declaring the production, dis-

tribution and price of milk to be a public utility, subject to state control.

"It is the unanimous opinion of all those who have made any study of the subject that the solution lies in state regulation, to the end that an adequate supply be always available at a price within the reach of all.

"I urge your honorable bodies to read these reports, having in mind that relief can only come by legislative action, and I strongly urge you to consider favorably legislation to carry these recommendations into effect."

This is not a recommendation of the non-partisan league in North Dakota nor the syndicalists, nor the Bolsheviks. It is from the Governor of the greatest state in the Union, and yet the State of New York still survives and there are still a few people who question the beneficent effects of an overruling Providence.

"WHAT DO YOU MEAN, RELIEF?"

The truth of the statement that language is a method of concealing thought was never better exemplified than in the War Minerals Relief situation as it has been shown to exist in the hearings before the Committee on Mines and Mining.

The intent of Congress in the passage of this legislation originally has repeatedly been made clear, but the verbiage by which that intent was expressed has been so construed that the intent has been impossible of execution.

Mandatory legislation is so much more difficult of execution than prohibitory that undue obstacles should not be put in its way. It is a well-established principle of law that relief legislation should be liberally interpreted. There is but little doubt that any relief bill ever passed could have been technically construed to a point where not one cent of the fund appropriated could have been made available.

That is certainly the case with the present law. But with the report of the Secretary of the Interior to Congress, dated December 1, showing thirty claims on which partial awards have been made

and four hundred and forty-two claims disallowed, out of a total of 1,203 filed, there is something wrong somewhere that should be made right. The Commission has emphatically maintained that it is not at fault in its rulings and procedure. The Commission has not had the hardihood to criticize the decisions of the Attorney General. There is only one other remaining factor in this problem which can be wrong, that is, the individual claimant. It must be the claimants who are at fault, but the Commission has done its best to correct this fault by eliminating 442 of them.

"IN GOOD FAITH"

The Government two years ago, was directing broadsides of appeal to its citizens in the mining business, by full page advertisements, begging them to produce war minerals. Wherever it could locate an individual miner who had such a deposit or who had become known to an authorized Bureau of the Government, he was specifically picked off by some individual in the bureau. Thus the campaign for the production of war minerals was pushed forward, by both broadsides of attack and individual sharpshooters.

Congress, a year ago, passed a law to reimburse the losses of those who were the victims of this attack. This law has now been construed so that only those who were picked off by the sharpshooters are to be taken care of. But the victims of the broadside are just as badly hurt as the victims of the sharpshooters.

Right here this vital truth should be pointed out. The liability of the Government did not arise primarily from the method of its solicitation for production, but it arose from its failure to sustain the markets for these minerals at prices and over a period for which the producers were assured it would be sustained.

Out of this failure arises the liability of the Government. And it is for this failure to carry out its part of the contract that the Government should now pay its citizens who have been the victims of its bad faith.

MONTANA AWAKENING.

Montana, always believed to be a state of hidden treasure, is awakening to her opportunity. A recent editorial in the *Helena Record*, in a most interesting manner discusses the rejuvenation of the state's mining industry and the indications of an enlarged development by the reopening and recapitalization of many of the older and abandoned properties. Montana has vast supplies of silver, zinc and lead, and the returning demand for these metals furnishes incentive which has resulted in local capitalists again entering into the mining industry.

 THANK YOU, SECRETARY WILSON!

The decision of Secretary Wilson that the Communist Party of America, which was largely represented among the three thousand radicals under detention at Ellis Island and elsewhere, is a Revolutionary Party directly contrary to the principles of the Constitution of the United States, was one of the most important and far-reaching decisions ever given by that official. No matter what else may or may not have been done by the Department of Labor, Secretary Wilson, by his fearless, and we believe, righteous, decision in this case has considerably increased the respect in which he is held by employers of labor in America.

Naturally the Communists do not desire deportation. They are in the amusing situation of objecting to their adopted land and objecting to leaving it. They do not like the principles of the United States Government, but they do not seem to relish the idea of placing themselves under control of Russia's dime novel government.

Congratulations, Secretary Wilson, and here's hoping that "short shift" will be given to the pleasant little party now assembled on Ellis Island awaiting a deep sea journey.

Au revoir and good-bye!

JOLLYING THE TAXPAYERS

The Bureau of Internal Revenue of the United States Treasury Department employs an official "cheer dispenser." Corporations and individuals who have received the recent issue of the pamphlet prepared by this official public jollier, "Income Tax Facts You Should Know," were no doubt amused and their financial burdens considerably lightened by the official assertion that "a man who pays an income tax this year has several reasons for which to be thankful." And then the official "cheer dispenser" proceeds to enumerate these reasons for thanksgiving: First, that the taxpayer's income for 1919 was sufficient to place it within the taxable list; second, that the normal rates for 1919 are lower than for 1918; and third, that the current Revenue Act is more liberal than preceding acts. At best, Commissioner Roper's administration of the Income Tax Law is an undesirable and unpopular job, and it is evident that he intends to make the job more popular by keeping the public good natured during the process of abstraction.

 A TRAGEDY

Samuel Gompers, the most widely known and widely quoted labor leader in the world, president of the American Federation of Labor, was seventy years of age on the 27th of January. During his sixty-ninth year he passed through experiences which would have tested the endurance and stability of a much younger man. Throughout the year there was a steadily growing but not well defined opposition to Mr. Gompers as the leader of organized American labor. Mr. Gompers' qualities as a labor leader have been questioned by a great many people in the United States, but the fact that a man could develop from the cigar makers' bench at which, until 1882, Mr. Gompers earned his daily bread and become unquestionably the recognized leader of such an organization as the American Federation of Labor, has won for Mr. Gompers a high regard for his ability. And it was interesting to note

that it was upon Mr. Gompers' seventieth birthday that Local 144 of the Cigar Makers' International Union rejected Mr. Gompers as one of its delegates to the national convention of that union. Since becoming president of the American Federation of Labor, Mr. Gompers has been one of the official representatives of his local, and this is the first time in his history as a laborite that he has been coldly and inconsiderately turned down for younger men. Significant indeed are the words of the secretary of Local 144 in explaining the defeat of Mr. Gompers when he said, "I believe that the failure to elect Mr. Gompers as a delegate was due to the influence of the younger men in the union. They are progressive and believe that Mr. Gompers is too conservative to advance the cause of labor with proper speed."

It is tragic that Mr. Gompers' seventieth birthday was made unhappy by this unexpected defeat at the hands of his associates, but it is much more tragic to those who have watched Mr. Gompers' recent activities that Local Union 144 announces itself as considering Mr. Gompers "too conservative."

REJUVENATION OF BUTTE

Butte, Montana, associated with much of the interesting romance as well as finance of the mining industry, is "coming back." Many of the old mines are being reopened; the old-time miners are returning to the camp. If Butte can be kept clear of labor disturbances, long the bane of that district, it is probable that it will once more occupy its unique position as the greatest of copper camps. Copper, by the way, is also "coming back" strong. The Lake Superior mines are planning for a big year; the foreign market has been broken into by the Calumet & Hecla, which has just sold ten million pounds to allied countries. Recently **twenty million pounds** of copper were exported to Germany and in the resumption of commerce and constructive work, not only in the allied countries but in the new republic of Germany, it is probable that American copper will play a very important part.

THE RIGHT TO STRIKE

Unconsciously, or perhaps more correctly speaking, subconsciously, there is growing throughout the United States a deep-seated belief in the rights of the unorganized majority. There is nothing in the Constitution of the United States which indicates that a man must join a union in order to earn an honest living. A man, under the Constitution and so far as we have been able to learn under the laws of this country, has a right to be a carpenter, a painter, a miner, a jeweler, a lawyer, or whatever his fancy commends, and can earn whatever his skill is worth in any form of labor without being interfered with by any man or group of men.

Organized labor has attempted through its absolutism to destroy the personal and Constitutional rights of every man who does not and feels that he should not join a labor union. Coercion, sometimes in the most obnoxious and dastardly forms, prevents hundreds and thousands of men from earning an honest and undisturbed livelihood because they object to signing certain union agreements. The act of the labor union in preventing any man from earning his living is in effect, if not in fact, an unconstitutional and to an extent a criminal act, and yet a few hundred thousand men injecting themselves forcibly upon the public in a dominating spirit have continually, persistently and effectively defeated the law and the Constitution; but beyond the rights of the individual are the rights of the collective and unorganized majority, and slowly but most certainly there is being established in the minds of thinking men an old principle of common law made new by resurrection. This principle was recently and tersely expressed by George H. Bailey, the General Counsel of the American Mining Congress, in these words:

"The right to strike is a qualified right, which ceases and becomes a conspiracy against the Government when it interferes with the production and distribution of the necessities of life."

This expression, adopted as a basic principle of activity on the part of the American Mining Congress, is meeting with general commendation and will, we believe, in case the Courts of the United States are called upon to render a decision, become an accepted principle of law.

SEDITION BILLS

There is always danger that the pendulum may swing beyond the line of gravity and become a destructive rather than a constructive force.

Months ago, long before the leaders in industry would admit the truth, the officers of the American Mining Congress sounded a warning in public and private that radicalism was abroad in the land; that Bolshevism in Americanized form was striving to gain a foothold in this country; and that intelligent, careful, but prompt and effectual action should be taken by the business interests of the country in time to prevent the serious growth of the movement to engulf the nation.

For a long time, even in the face of the fact that the Lusk Investigating Committee in New York was unearthing evidence disclosing the existence of a well-defined conspiracy against the Government warnings went unheeded. It is true that a group of business men—producers of coal, petroleum, minerals, and manufactured goods, and a few of the more serious students among the leaders in the banking world—organized an investigative movement.

And the investigation following developed the startling fact that anarchy was becoming a popular plaything; sedition was openly taught; that revolution was being advocated; and that hundreds of thousands of men in round figures, a full million in New York City alone, were enlisted in several revolutionary, communistic, and radical socialist movements, all having for their object the final overthrow of the present form of government and the establishment of some sort of a political and financial Utopia in the United States.

The first open evidence that union labor had become permeated with this sort of Russian poison was when, in the face of appeals to rationalism and with a knowledge that once started it might not end until it had either destroyed itself or the American people as a government, the steel strike was called.

The second indication came when, in the face of appeals of the President of the United States and the knowledge that their action might impoverish thousands, cause general commercial disruption, and destroy human life, the leaders of the coal strike called their men from the bituminous mines and gloried in the fact that the whole country was soon made to suffer.

And when it was shown that the men back of these movements were extremists, not openly avowed revolutionists but thoroughly imbued with the spirit of revolution, there was no repudiation of either spirit or men by the American Federation of Labor, of which the striking organizations were a very important integral part. When the Government called a labor conference to find, if possible, the panacea for the existing troubles, Mr. Gompers and the labor group constituted a large proportion of the objecting elements in the conference, and the conference finally disintegrated because of the impossibility of reaching a decision. The adjournment of the labor conference without an effort at reconciliation between worker and employer had one very good commendatory result. It forced activity upon the Department of Justice. The Attorney General, who had been accumulating evidence as to the activities of radicals and had unearthed some startling information, immediately threw his dragnets over the country and began a round-up which, the citizens of the country are happy to note, has resulted in a partial house-cleaning—the deportation of a number of obnoxious trouble makers and the incarceration, with the probability of future deportation, of thousands more of these undesirables.

To make the Government's campaign

more effective, to protect the Government from complete engulfment in the way of radicalism, to hold up the hands of the men and organizations who are fighting to eradicate the spirit of anarchy from the United States, certain bills were planned along drastic lines. The framers believe that the United State of America is no place for the man who is not for this Government. They believe that the alien who comes here should live peacefully, lawfully, and respectfully under the laws which have been given him by the framers of the Constitution and the Congress of the United States. They believe that the hyphenated citizens and the misguided theorists, who preach dissolution of the Government and disobedience of the law and seizure or nationalization by force of public and private industry, belong in some other land, and hence the radical and drastic provisions of the Sedition Bills. With due regard for the judgment of the publishers and labor leaders who are endeavoring to prevent the passage of the Sedition Bills, and some of their objections are well founded, the MINING CONGRESS JOURNAL believes that the Congress of the United States should make it impossible for anarchists, radical socialists, revolutionists, and Bolsheviks to live in this country in peace. The man, or the group of men, attacking the Constitution of the United States, attempting to destroy the basic principles of the Union, blocking industry, or preaching sabotage should either be incarcerated permanently or deported to lands which seem to be in accord with their ideals.

INDUSTRIAL CONSUMPTION OF GOLD

The actual sale of gold bars to the trades during the calendar year, made by the New York, Philadelphia, San Francisco and Denver offices of the U. S. Mint Service, totaled \$76,837,600. To this amount has been added \$3,500,000 to allow for the gold coin used for manufacturing purposes, thus making a total of \$80,337,600, an increase of \$27,927,860, or 53.2 per cent, over the 1918 trade

consumption. For the first time in the history of the country gold was exported to Europe for manufacturing purposes. Of the total sales of gold bars to the trades during 1919, which amounted to \$76,837,600, \$14,538,119 was exported for manufacturing purposes. The production of new gold during 1919, as reported by the U. S. Mint, was \$58,488,800, an amount which failed to equal that consumed by the trades for manufacturing purposes by \$21,848,800, or 37.4 per cent. In 1915, \$63,215,673 was the highest amount produced in excess of that consumed in the trades for the past decade, which amount has declined progressively until, in 1918, the surplus was but \$16,236,960, due entirely to a decline in production, since the amounts of gold consumed in the trades are practically equal for the years 1916, 1917, and 1918. This last year, however, due to a continued decline in the gold production, coupled with a still greater increase in the consumption of gold in the arts, a shortage has occurred for the first time in the history of the country.

It is evident that the conditions which produced the economic pressure which has forced and will continue to force a decline in the gold output will, on the other hand, be in favor of an expansion in the jewelry trade and the volume of gold consumed therein, and that, therefore, with the same economic conditions continuing through 1920, the consumption of gold in the arts probably will be more rather than less than that of 1919. With the same consumption in the arts, the estimate of \$40,000,000 as the production for 1920 will leave a deficiency in excess of \$40,000,000 this year.

To safeguard the monetary gold reserve from this heavy depletion by industrial use, the excise and premium proposal will soon be suggested for the consideration of Congress. The bill merely creates the machinery by which the consumers of gold in manufactures and the arts may be supplied with sufficient gold to meet their requirements without drawing upon the monetary reserves which sustain the country's credit. This is to be accomplished by an excise which will

enable the gold producer to increase the output to satisfy the anticipated trade requirements.

GEO. OTIS SMITH TALKS ON NATURAL GAS CONSERVATION

In the course of an address at the National Gas Conference, George Otis Smith, Director of the United States Geological Survey, said:

"Natural gas, with its millions of users, is one of the great public utilities. Like the power companies, the gas company deals in service to the public, and the quality of that service is logically the measure of the corporation's standing in the community and in the nation. In one of the engineering journals a recent article, in describing a great interstate power system, classified the causes of interrupted service on their lines. While lightning and sleet and high winds, which must be put outside the control of either company or customer, together caused 33 per cent of breakdowns, failure of the customers' apparatus and their carelessness in operation aggregated 35 per cent interruption in service, while the corresponding figure for company failure and carelessness was less than 10 per cent.

"This illustration from another field of public service is doubtless in line with experience in the natural gas industry. In the matter of waste today, I am told the customers must be charged with far the greatest amount, and the fact that they have paid for what they waste will not clear them at the bar of public opinion. Ownership is today defined more and more in terms of good use; miser and spendthrift are alike outside the pale of the best society. It is probably true that the market price of natural gas has been too low to encourage economy in its use. So, quantity and the quality of service rendered the public largely depend upon the consumers, and a large national end may be attained by this conference if the natural gas industry and the public utility commissions work together to educate the general public. Thrift in the uses of natural resources like other economies needs to begin in the home."

Lake Movement of Iron Ore

The total movement of iron ore by water from the Lake Superior region during the season just closed amounted to 47,177,395 tons, an anticipated decrease from that of 1918, when it amounted to 61,156,732 tons. These shipments were the smallest in the last four years, the decrease being chiefly the result of labor troubles.—Bureau of Mines.

The Edison Storage Battery Co. announces the removal of its District Office in Pittsburgh, Pa., to Room 431, Union Arcade Bldg.

The removal has been made necessary by the tremendous increase in the volume of business handled through this office. The new location provides better facilities and has large office space.

MANNING URGES COOPERATION

TO PREVENT GAS WASTE

Summing up his speech before the National Gas Conference, Van H. Manning, director of the United States Bureau of Mines, said:

"In conclusion, I might say that no one in particular in the industry has been to blame, but there are opportunities for all to improve, and methods of improvement can be instituted which will definitely insure valuable returns to all concerned, as has been shown by the field operations in the Osage Nation. This end of the problem is probably a little easier to handle than the utilization end. Here we have a rather complex system of production problems in one state, transportation systems in another, and utilization problems in still another. Thus it would seem that, aside from educating the general public on conservation methods and showing them wherein they save for the producer they ultimately save for themselves, the various utilities and intra-commerce commissions will necessarily have to work hand in hand and devise and work out problems so that there will be an amicable understanding and a fair consideration of the problems of others, in every case.

"Cooperation, then, should be our keynote, with specific examples before us on which to build up our general plans. It is, therefore, earnestly hoped that, with the information at hand, some method of increasing our ultimate supply, by more efficient production, transportation, and utilization, may be consummated.

"That the problems we are attempting to solve cannot be overestimated cannot be better emphasized than by pointing out to you the condition which would confront us provided our supply of natural gas were suddenly taken away. Not only would it be necessary for us to turn to another fuel at a greater cost, but inasmuch as the utilization of natural gas might be considered a labor-saving device, we would ultimately take away some of the comforts that have been given us by the foundation of this important industry."

STATUS OF WAR MINERALS RELIEF CLAIMS IS SHOWN

The status of war mineral claims as of January 10 is shown by the following:

Total number of claims allowed in part.....	43
Total amount claimed therein....	\$1,904,405.23
Total amount recommended therein.....	\$576,781.78
Average percentage recommended.....	30

Status of Funds

Amount of appropriation.....	\$8,500,000.00
Total expenses to date \$173,000.00	
Total awards to date 576,781.78	
	749,781.78
Balance.....	\$7,750,218.22

PRESIDENT'S COAL COMMISSION HEARS OPERATORS AND WORKERS

Other than to say that the President's Coal Commission very evidently expects to render an award within the time limit suggested by the President, sixty days, few deductions are possible. The following condensed summary of the proceedings are of greatest importance, however, since never before have many of the principles involved been subject to arbitration. The proceedings are reviewed in chronological order:

Hearings before the commission of three appointed by President Wilson to inquire into the bituminous coal situation, began Monday, January 12, in the Red Cross Building, with Henry M. Robinson presiding as chairman. The other members of the commission are Rembrandt Peale, representing the operators, and John P. White, the miners.

A preliminary general presentation of their respective cases by operators and miners occupied the proceedings up to Thursday, January 15, when the commission adjourned until the 19th to allow the operators to conclude their side, after which both sides, it was agreed, would go into detail on the various questions raised offering various data in support of their claims.

Speaking for the miners were John L. Lewis, acting president of the United Mine Workers of America, William Green, secretary and treasurer of the Mine Workers, and, representing the several districts in the Central Competitive Field, were President Murray of Pennsylvania, President John Moore of Ohio, President Edward Stewart of Indiana, and President Frank Farrington of Illinois.

THE MINERS' DEMANDS

The keynote speech of President Lewis, on the opening day, taken in conjunction with the statements of the four district presidents, emphasized that the miners are before the commission with the demands formulated at their Cleveland Convention unmodified, these demands including the 60 per cent increase in wages, a six-hour day and five days a week. The miners' representatives outlined a comprehensive field of inquiry from their own viewpoint, embracing matters pertaining to wage scales, working conditions in the mines, differentials, and other points which they regard as being involved in the controversy.

OPERATORS' REPLY

The operators replied to the miners' demands through Ralph Crews of the law firm of Shearman & Sterling of New York, and Phil H. Penna, secretary of the Indiana Association of Bituminous Coal Operators. They argued that the miners' demands for more wages and shorter hours were unreasonable, inasmuch as the 14 per cent increase now in effect more than covers any increase in the cost of living which the miners have been compelled to meet, and that shorter

hours would curtail production and thus make coal prices higher. They pointed out that the introduction into the controversy by the miners of local differences, differentials, etc., opened up before the commission an unending field of inquiry of which it would be almost impossible for the commission ever to make an end. Mr. Penna asked for legislation to compel the United Mine Workers to keep the contracts they make with the operators through collective bargaining, declaring that the present system of collective bargaining, to which one side was an irresponsible party, was a farce.

CHAIRMAN ROBINSON OUTLINES SCOPE

In opening the hearing, Chairman Robinson said he would like to explain his own position as representing the public in the inquiry. He said he had been for twenty years—and up until three years ago—interested in coal lands, and so had a business knowledge of the industry; that he had never, however, been connected with the operation of mines. He urged the necessity for haste in finishing the work before the commission to keep within the 60-day limit suggested by the President, and stated that the scope of the inquiry would not be confined to the Central Competitive Field, which includes Western Pennsylvania, Ohio, Indiana and Illinois, but that the basis arrived at for the Central Competitive Field would be used in determining the findings for the outlying districts.

The secretarial force of the commission was announced as follows: Herbert M. Shenton, executive secretary; Samuel A. Taylor, technical adviser; Alexander C. King, counsel; Charles O'Neill, Percy Tetlow and E. A. Goldenweiser, secretaries; K. C. Adams, director of information; Mrs. Mary Burke East, official stenographer.

MR. LEWIS SPEAKS FOR MINERS

Early in the first day's proceedings, Chairman Robinson asked Mr. Lewis, spokesman for the miners, if the United Mine Workers were there to assist in the investigation and if they were willing to submit to the award of the commission. Mr. Lewis replied that the Mine Workers were prepared to assist in every way; that they submitted their interests to the commission "without reservation and would abide by its judgment."

OPERATORS PUT IN QUESTIONS

When Chairman Robinson put the same question to Thomas T. Brewster, chairman of the Scale Committee of Bituminous Operators of the Central Competitive Field, Mr. Brewster replied that, before answering the question, the operators desired to submit a written statement of their position, embracing ten questions, the answers to which would enable the operators to define their attitude toward the inquiry. The

statement of the operators, after expressing hearty accord with any plan to settle the present controversy, put the questions upon which the operators desired enlightenment as follows:

First: Is it the intention of the commission to investigate and act upon matters in the Central Competitive Field only?

Second: Will the award of the commission be final and constitute a contract, binding upon both parties?

Third: Will the commission in its award provide a method by which the contract entered into may be enforced?

Fourth: Will the commission investigate and act upon matters brought before it by either party, including the "check-off" system now in effect?

Fifth: Will the commission fix the basic principles upon which evidence is to be submitted, particularly with regard to wages?

Sixth: Does the commission understand that it has the authority, should the facts warrant such findings, to adjust wages, either upward or downward?

Seventh: Does the commission consider it practicable to make a retroactive award, either as to wages or selling price of coal?

Eighth: Will the commission immediately determine the cost of coal during the year 1919, and the present cost based upon the 14 per cent advance granted the miners, to determine fair selling prices, to be effective at once, having in mind the fair and reasonable profit provided by law?

Ninth: Will the commission's awards as to the selling price of coal be made to expire simultaneously with the expiration of the Lever Law?

Tenth: Will the commission provide in its award for the introduction of modern devices, which may serve to reduce the cost of coal, and consequently the cost to the public?

OPERATORS WANT ISSUE CLARIFIED

Chairman Robinson asked Mr. Brewster if the operators intended to make the answering of these questions a condition precedent to their agreeing to accept the award of the commission. Mr. Brewster stated that the purpose of submitting the questions was merely to clarify the issue.

Mr. Brewster suggested that the main issue before the commission was the miners' demand for more wages. The operators, he said, were ready to cooperate with the commission to provide the fullest information possible on this question and that the operators felt they should be bound by the decision of the commission upon this point. When asked by Chairman Robinson if that was as far as the operators at present were willing to go. Mr. Brewster replied:

"No, that is only the door."

Upon suggestion by Mr. Penna, the commission recessed until the next day, Tuesday, to give the operators an opportunity to outline their attitude before the commission. Meanwhile, Chairman Robinson promised that the commission would consider the questions submitted by the operators and make a statement on them later.

SAYS OPERATORS WILL COOPERATE

The position of the operators was fully outlined at the opening of the second day's hearing by Mr. Crews in a written statement which he read before the commission. In this statement, the operators declared they were willing to cooperate fully with the commission and abide by its findings, with one reservation:

"That they are advised that they may not lawfully be parties to any arrangement by which the price of coal is fixed beyond the date when the Lever Law shall be effective, and they, therefore, will be bound by any action of the commission fixing prices only during such period of time as the Lever Law shall be effective."

The statement further said that the operators would submit to the award of the commission "with the understanding that the award shall embrace a decision, binding upon the miners and operators, and shall in and of itself constitute the final contract between the miners and operators for such period of time as shall be finally fixed by the commission."

OPERATORS' PRICE FIXING RESERVATION

Chairman Robinson asked Mr. Crews if the operators insisted upon the phrase "shall in and of itself constitute the final contract between miners and operators." Mr. Crews explained that the operators did not insist upon this phraseology; that they only wanted the award of the commission so final and conclusive that there could be nothing left for further discussion.

Further questions and explanations brought out that the operators' reservation was concerned with price fixing solely.

FOR COMMISSION TO DECIDE

Acting President Lewis of the United Mine Workers raised a point as to whether the operators' reservation carried with it an implied opportunity for either side in the controversy to avoid making an agreement following the commission's award. Chairman Robinson answered that Mr. Crews had said this was for the commission to decide, whereupon Mr. Lewis stated that the chairman's statement cleared the record sufficiently for him.

Referring to a statement made in a letter by President Wilson on the coal situation, in which the President said, "I understand the operators have generally agreed to absorbing the increase of 14 per cent in wages so that the public would pay not to exceed the present price fixed by the Fuel Administration," Mr. Crews said that the operators at no time had said they would waive any rights that might be theirs as to contracts for the sale of coal. He asked to insert in the record a letter from the operators to Dr. Garfield defining their acceptance of the 14 per cent proposal.

MINERS WANT "FAIR LIVING WAGE"

Acting President Lewis addressed the commission as the miners' representative, outlining their demands. He said the miners believed they were entitled to a "fair living wage, and the best working conditions that can be provided," and that

their occupation should be rendered "more healthful and less hazardous." He reviewed the demands of the miners formulated at the Cleveland Convention, embracing:

A 60 per cent increase in all day labor, tonnage yardage and dead work; a 6-hour day, five days a week; time and one-half for overtime and double time for Sundays and holidays. The miners also wanted internal differences, not covered by interstate joint agreement, to be referred back to the respective districts for adjustments.

INCREASED WAGE AND SHORTER DAY

Mr. Lewis said the miners had received no increase in wages since October 6, 1917, until the recent application of the 14 per cent by the Government, and that meanwhile "the cost of living has advanced more rapidly to the miner than to nearly any other class of artisan." Arguing for a shorter working day, Mr. Lewis said such an arrangement was not for the purpose of giving the miners more idle time, but to give them "continuity of employment," declaring that, at present, the miner worked only part time, because the mines operated on an average only 200 days in the year.

SECRETARY WILSON'S 31.6 PER CENT

Secretary-Treasurer Green, who followed Mr. Lewis, insisted that the 14 per cent increase in wages proposed by the Fuel Administration was not sufficient to meet the increased cost of living for the miners, and pointed out that Secretary of Labor Wilson had decided that the miners were entitled to an increase of 31.6 per cent.

DIFFERENTIALS AND INTERNAL QUESTIONS

The subject of differentials and internal working conditions in the Pittsburgh district was introduced by President Murray of District No. 5, United Mine Workers. Mr. Murray presented to the commission five points upon which the miners of his district desired action. They were: compensation for the removal of slate; differentials between the thick-vein and thin-veined portions of the district; abolition of charges for the use of safety lamps; free powder; objection by the miners to pushing pit cars.

"A FAIR ADVANCE"

At the third day's hearing, January 14, President Moore of District No. 6, of Ohio, stated that the 60 per cent increase would only be "a fair advance." Mr. Moore touched upon hours of employment and internal working conditions in his district, representing that the miners in Ohio worked more than eight hours a day. The mule driver, for example, he said, was obliged to take the mules to and from the job on his own time, Mr. Moore contending that the operator should pay for this work.

OTHER POINTS RAISED

President Stewart of the Indiana miners took up the hours of working for hoisting engineers and firemen, who, he said, were compelled to work ten or twelve hours for eight hours' pay. The question of pay for the removal of slate, differ-

entials between pick and machine mining and the division of work between mines operated by the same company, together with the question of payment of shot-firers by operators and the blacksmithing bills which the miners must pay, were also touched upon by Mr. Stewart.

"MODEST DEMAND"

President Farrington, of Illinois, declared, in opening his argument before the commission, that the demand for a 60 per cent increase in wages "is a modest one, and even though granted would not give to the mine workers the wage that would enable them to live in a way that they should be able to live." Mr. Farrington criticized Dr. Garfield's figures upon which, as Fuel Administrator, the latter based his opinion that a 14 per cent increase would cover the increase in the cost of living for the miners. He said that the men who were paid the "maximum inside day wage scale in Illinois" now received the "munificent" sum of \$5.70 for eight hours' work.

FARRINGTON'S FIGURES

Mr. Farrington presented to the commission these figures, showing, he said, the average yearly earnings of the miners in the Illinois district from February 1, 1913, to July 1, 1919:

1913-14.....	\$704.68	1916-17.....	\$775.09
1914-15.....	649.82	1917-18.....	944.65
1915-16.....	671.76	1918-19.....	1,390.38
January 1, 1919-July 1, 1919—\$572.08			

Miners in the Illinois district, Mr. Farrington said, were able to get work on an average of only 201 days a year.

In the year 1914, Mr. Farrington said the unions paid more than \$500,000 to miners out of work and their families. The miner, he declared, was a patriotic citizen, eager to work but unable to get sufficient work. He said the Illinois miners had purchased \$50,000,000 worth of Liberty Bonds, but that 90 per cent had been forced to sell their bonds at a discount, after the armistice to enable them to live and keep their dependents.

COST OF LIVING FIGURES

Mr. Farrington presented to the commission statistics of five mining towns in the Illinois district, compiled, he said, upon the food, clothing and essential commodities which the miners purchased, which showed an average increase in price of 143 per cent since 1913.

At Hillsboro, Ill., where 55 items were taken into consideration, the increase was 110 per cent; at Belleville, where 44 items were considered, the increase was 131 per cent; at Spring Valley, where 45 items were considered, the increase was 110 per cent; at La Salle, where 56 items were considered, the increase was 129 per cent, and at Canton, where 32 items were considered, the increase was 178 per cent.

Mr. Farrington said the mining industry was the only big industry in the country where workers were not allowed extra compensation for their overtime. He discussed the weekly pay, internal differences of the Illinois field as between the thin

and thick coal seams, double shift, differentials between pick and machine yardage, mine examiners' wages, slate removal, explosives, the electric lamp, the docking rule and the four cents differential in southern Illinois.

CREWS SPEAKS FOR OPERATORS

In opening the operators' case before the commission, Mr. Crews pointed out that "it would be a task of almost unending difficulty for the commission to undertake seriatim to consider and discuss all the problems that have been presented by the miners."

"In my judgment," said Mr. Crews, "you must deal as a whole with the situation that has been produced by 33 years of bargaining, or you gentlemen must be reconciled to deal with this industry for months and months to come."

Mr. Crews said that in his opinion the wage scale was the entire issue before the commission.

He read to the commission the reply of the operators to the demands which the miners made at the Cleveland convention, in which the operators said that the demands of the miners carried with them a repudiation of their contract, which was to run "during continuation of the war and not to exceed two years from April 1, 1918."

OPERATORS ANSWER MINERS

In this letter, the operators stated that national necessity for the greatest possible production would not permit curtailment of the working time; that the proposed 60 per cent increase in wages would more than double the already high cost of producing coal; that the automatic penalty clause was necessary on account of the "inability of the union officials to prevent illegal strikes in violation of contract obligations."

Mr. Crews quoted a letter from Dr. Garfield to Chairman Brewster of the Operators' Scale Committee, in which Dr. Garfield said that the Washington Wage Agreement does not expire "until peace is promulgated, or until the first of April, 1920."

STRIKE DEPLORED BY PRESIDENT

Mr. Crews placed on record the order of Acting President Lewis, issued October 4, 1919, calling a general strike in the bituminous coal industry. He quoted a letter from President Wilson to Secretary of Labor Wilson in which it was suggested that the dispute between the miners and operators should be referred to a Board of Arbitration, and read the statement of President Wilson of October 25, in which the President deplored the proposed strike. In this statement, the President pointed out that the miners, in going on strike, would abrogate their contract; would bring great hardship to the country, and that "a strike under these circumstances is not only unjustifiable, it is unlawful." Mr. Crews told the commission that figures would be presented which "will disclose the staggering consequences that would follow the granting of a demand for the wage schedule to be increased 60 per cent."

SAYS 14 PER CENT ENOUGH

Mr. Crews said that inasmuch as the miners' application for an advance in wages made in

August, 1918, had been declined by the Fuel Administrator, supported by the President, it was evident that the Government considered that the miners' wages were adequate up to that date. Since that date, he said that, in his opinion, the 14 per cent difference has amply compensated for any increase in the cost of living.

The miners' wish for a shorter working time, Mr. Crews characterized as "a perfectly natural manifestation of a perfectly natural human desire," saying that he, himself, would like to work under such circumscribed hours and that doubtless, the commission would likewise, but that, unfortunately, it was not possible of accomplishment. He said it was not fair for the miners to expect to be paid for the time occupied in getting to their working places.

OCCUPATION "NOT INJURIOUS"

Mr. Crews continued his presentation of the operators' case before the commission on the fourth day of the hearing, by taking up the claim made by Acting President Lewis that the miners' occupation is injurious to health. Mr. Crews pointed to Acting President Lewis, Secretary Green, Mr. Farrington and Commissioner White, as examples of the robust physique developed by mining.

Mr. Crews stated that shorter hours would not distribute the working time at the mines over a longer period, and so give the miner greater continuity of employment, because of the fact that mining is a seasonable business, owing to the fluctuation of the public's demands for coal. When the mines otherwise could run at capacity, Mr. Crews stated, the car supply becomes the limiting factor.

PENNA STATES CASE

Mr. Penna, in opening his statement of the operators' case, said that the operators were heartily in accord with the desire of the miners for constantly improving their standard of living. He declared, however, that they considered the present schedule of wages adequate to a respectable standard of living. If a man is satisfied to get along on what he can make by working only two or three days a week, Mr. Penna pointed out, "no legislation can arouse that man's ambitions and desire to improve his surroundings."

The higher schedule of wages, Mr. Penna stated, would not relieve the burden of unemployment, due to the seasonable nature of the mining industry. He said there must be a limit to the movement reducing hours of labor in industry and that in his opinion, that limit had been reached in the bituminous coal industry with the eight-hour day. Any further reduction, he said, would curtail production and send up the price of coal.

Mr. Penna had always been a champion of the system of collective bargaining, he said, but agreed that "collective bargaining with responsibility on one side and irresponsibility the greatest asset of the other party, is a farce."

(Continued on page 86)

NATIONAL LEGISLATION

The Senate on January 5 passed S.2189, providing for agricultural entries on coal lands in Alaska. On January 28 the Senate also passed S.3315 known as the "Americanization Bill." Hearings have been continued during the month on tariff measures, the Senate Finance Committee giving special attention to the Tungsten Bill, which it is anticipated will be reported out of the committee at a very early date. The House Mines and Mining Committee has been holding hearings upon H. J. Res. 170, the bill to liberalize the War Minerals Act. A detailed report of what has been done at these hearings will be found in another part of the JOURNAL. The Leasing Bill hit a snag on Section 18 through Mr. Sinnott. However, the difficulties are gradually being ironed out and Senator Smoot believes that the committee will report a bill at an early date. There have been some considerable changes made, which the committee have not yet announced. The following bills, of interest to the mining industry, have been introduced since our last issue:

Coal

S. J. Res. 146, Income Tax.—Introduced by Mr. Harris and referred to the Committee on Finance, provides that the Secretary of the Treasury be directed to furnish the Senate information concerning the income and profits tax returns for the taxable year of 1918 of all corporations as follows:

"Capital stock; invested capital; net income; tax (1) income, (2) excess profits, (3) total; per centum of total tax to net income; net income, after deducting tax; per centum of net income to capital stock; per centum of net income to invested capital; per centum of net income, after deducting tax, to capital stock; per centum of net income, after deducting tax, to invested capital; capital stock, 1917; net income, 1917; per centum of net income to capital stock, 1917; excess of the per centum of net income to capital stock for 1918 above the percentage for 1917.

"That the information be transmitted in form similar to that obtaining in Senate Document Numbered 259, Sixty-fifth Congress, second session, which contains the information transmitted by the Secretary of the Treasury in response to the resolution of the Senate of June 6, 1918, and that the corporations be listed in

the same sequence and under the same symbols, as far as possible, as obtain in Senate Document Numbered 259."

H. R. 11952, Coal Export.—Introduced by Mr. Dyer, referred to the Committee on Interstate and Foreign Commerce. The Bill prohibits the export of coal from the United States, and is as follows:

"Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. That from and after the passage of this Act it shall be unlawful to export from or ship from or take out of the United States any anthracite or bituminous coal, lump, slack, shale, coke, or any compositions used for fuel of which coal or coal dust is the component material of chief value.

"Sec. 2. That any person, firm, or corporation who shall export, ship, or take out, or deliver or attempt to deliver for export, shipment, or taking out, any article in violation of this Act or of any regulation or order made hereunder, shall be fined not more than \$10,000, or, if a natural person, imprisoned for not more than five years, or both; and any article so delivered or exported, shipped, or taken out, or so attempted to be delivered or exported, shipped, or taken out, shall be seized and forfeited to the United States; and any officer, director, or agent of a corporation who participates in any such violation shall be liable to like fine or imprisonment, or both.

"Sec. 3. That the Secretary of the Treasury is hereby authorized and directed to make all necessary regulations and orders for the purpose of carrying out the provisions of this Act.

"Sec. 4. That this Act shall remain in full force and effect for a period of five years from the date of the passage thereof."

Blue Sky Law

S. 3702, Regulating Sale of Stock.—Introduced by Mr. Kenyon, referred to the Committee on Interstate Commerce, regulates the issuance of stock by corporations engaged in interstate commerce. The bill provides that whenever an offering is made to the public of an original issue security by any corporation engaged in interstate commerce it shall file with the United States Postmaster at its legal address and with the Federal Trade Commission at Washington, a statement showing the purposes for which the corporation is organized; its officers and directors with their residences; the last balance sheet of the corporation, showing in detail all payments for tangible and intangible property, good will, promotion fees, and all other agreements for the disbursement of money except that used for the purposes to which the proceeds of the sale of the new security are to

be devoted; the terms of the flotation showing the price at which the securities are sold; the estimated expense of the flotation; the name of the underwriters, the terms of the underwriting, and the names of and terms by which subunderwriters, syndicates, bankers, brokers and others deal in the original sale of such securities. Section 2 provides that the statement above provided for shall be a public record; that every demand, prospectus or circular offering such securities for sale must contain the information above described, and that copy of the same must be attached to each bond, certificate of preferred or common stock and to each receipt or certificate evidencing a subscription to such security. Any false or misleading statement in the statement herein referred to shall constitute perjury, and such persons signing the statement may be proceeded against by the district attorney. Section 3 provides that any purchaser who may purchase such original issue of security where material misstatement is made in the statement may recover twice the amount of all moneys paid for such original security and may join the issuing company and each of its officers, directors and promoters, as well as the underwriting syndicate; and judgment shall be rendered jointly and severally against each one thereof if and when material misstatement is established. The suit must be brought within one year after the purchaser shall have had knowledge of such material misstatement. Any person who shall mail or cause to be mailed in any post office of the United States any original issue security, knowing that the statement required by this section has not been filed as prescribed by this Act, or who shall mail or cause to be mailed any statement required by this section, knowing same to be false in any particular, shall be fined not less than \$5,000, or imprisoned not more than five years, or both.

Bolshevism

H. R. 11,430, *Sedition*.—Introduced by Mr. Graham, and referred to the Committee on the Judiciary, from which committee it was reported January 12, amended as follows:

"The bill provides that whoever incites, sets on foot, assists or engages in any rebellion against the United States or the authority or laws thereof or whoever assists or engages in the use of force or violence with intent to destroy or cause to be changed, or to overthrow the Government of the United States, and the death of any person or persons is caused or results directly therefrom, shall be guilty of a felony, and on conviction shall be punished by death, or shall be imprisoned for not more than twenty years or fined not more than \$20,000, or both, and shall forever be debarred from holding office under the United States; in case death does not result, on conviction such persons shall be imprisoned not more than twenty years or fined not more than \$20,000, or both. It provides that no person shall orally, or by writing, printing, or the use of any sign, symbol, picture, caricature, or otherwise teach, incite or encourage forcible

resistance to or destruction of the Government of the United States. Section 12 provides that any alien convicted under the provisions of the Act after serving his sentence shall be deported under the immigration laws. The bill is quite specific, and very clearly and lengthily defines the things which may not be done."

Tariff

H. R. 11,815, *Graphite*.—Introduced by Mr. Fordney, referred to the Committee on Ways and Means, provides for a duty of 1 cent per pound on crude crystalline graphite ores containing 50 per cent or under of graphite carbon; 2 cents per pound for ores containing over 50 per cent of graphitic carbon; 3 cent per pound for lump and chip crystalline graphite; 6 cents per pound on flake crystalline graphite, crude concentrates, and refined flake; upon all other products, manufactured materials, and compounds containing graphite, crystalline or amorphous, not specifically provided for in this Act, in addition to any duties assessed and collected under existing law, a duty of 5 cents per pound for the graphite therein contained.

S. 3611, *Chrome*.—Introduced by Mr. McNary, and referred to the Committee on Finance. The bill provides for 50 cents per unit of Cr_2O_3 on crude chrome ores and chromium ores and concentrates thereof; $11\frac{1}{2}$ cents for each pound of metallic chromium upon ferrochrome and other metallic alloys containing chrome; 65 cents per unit of Cr_2O_3 upon refractory brick and material used for refractory purposes, containing chrome; and a tariff of 90 cents per unit of chrome contained in chemical compounds and articles manufactured therefrom containing chrome or chromite. These tariffs shall be collected in addition to any tariff duties now in force.

H. R. 12014, *Cobalt*.—Introduced by Mr. Rhodes and referred to the committee on Ways and Means. This bill provides that upon the passage of the Act there shall be imposed, levied and collected upon the articles herein named a rate of tariff upon the following: Cobalt, oxide of, 25 cents per pound. Section 2 of the bill provides that on all importations of cobalt, oxide of, there shall be estimated at the port of entry and a bond shall be given in a sum double the amount of such estimated duty for the transportation of said commodity by common carrier bonded for the transportation of appraised or unappraised merchandise to properly equipped sampling establishments, whether designated as bonded warehouses or otherwise. On the arrival of the commodity at such establishments it shall be sampled according to commercial methods under the supervision of government officers, who shall submit the samples obtained to a government assayer, who shall make a proper assay of the sample and report the result to the proper customs officers, and the import duty as provided by the Act shall be liquidated thereon. Section 3 of the bill repeals all existing laws affecting the rate of duty on cobalt.

H. R. 8078, Cobalt.—Introduced in the Senate September 29, 1919, known as the "Dye Bill," was amended January 20 by inserting "25," so that the article shall read "Cobalt, oxide of, 25 cents per pound."

Anti-trust

S. 3720, Combinations.—Introduced by Mr. Smoot, referred to the Committee on Interstate Commerce, amending Section 10 of the law against unlawful restraints and monopolies, approved October 15, 1914, as follows:

"None of the provisions of this section shall be construed to include or apply to any railroad, all of the shares of stock or property of which is owned by a person or corporation whose plant, shops, mills, or factories such railroad is principally engaged in serving, nor to any director, agent, manager, or officer of any such railroad."

Excess Profits Tax

H. R. 11985, Repeal.—Introduced by Mr. Bacharach, referred to the Committee on Ways and Means. This bill provides for the amending of the Revenue Act of 1918 by striking out sections 503, 504, 628, 629 and 630, and inserting therein as follows:

"1. A tax equivalent to 1 cent for each \$1 or fraction thereof of the amount paid for any article of merchandise when sold by a dealer for consumption or use, up to but not including \$500; and 5 cents for each \$1 on any article of merchandise, when sold for \$500 and above. Where more than one article is sold in one transaction, the tax shall be computed on the total amount paid for all such articles, but this section shall not apply in any case where the total amount paid is less than 50 cents.

"2. A tax equivalent to one-half of 1 cent for each \$1 or fraction thereof on all real estate sales of \$500 and above.

"3. A tax of 1 cent for each \$1 or fraction thereof on sales of all raw materials taken from mines, woodlands, waters, and so forth.

"4. Such tax shall be paid to the vendor by the purchaser at the time of the sale, and shall be collected, returned, and paid to the United States by the vendor in the manner provided by rules and regulations of the Treasury Department."

Monetary

H. R. 12039, Roosevelt Penny.—Introduced by Mr. Vestal, referred to the Committee on Coinage, Weights and Measures. This bill authorizes the issuance of a Roosevelt 2½ cent coin. The particular interest in this bill centers around the fact that thousands of dollars each year go to the merchants of the country in half cents. Mr. Vestal believes with the coinage of the 2½ cent piece that there would be a considerable saving to the individual.

Miscellaneous

S. 3612, Bureau of Efficiency.—Introduced by Mr. King, referred to the Committee on Civil

Service and Retrenchment. The bill provides for the creation of a Bureau of Efficiency, whose duty it shall be to institute and conduct a thorough and detailed examination of the personnel requirements of the various departments and department offices, to ascertain whether and to what extent any such department or department office has too large or too small a number of employees to enable it to perform its duties properly, and to determine what, if any, employees are unfit or inefficient. If the bureau, after investigation, finds that more employees are assigned to any department than are reasonably necessary to perform the work properly, it shall make formal report to the department head concerned, and recommend that unnecessary employees be either discharged or transferred to another department. The bill appropriates \$50,000 to carry out its purpose.

H. R. 12104, Special Privilege, Cabinet Members.—Introduced by Mr. Mooney and referred to the Committee on the Judiciary. The bill provides that the Secretaries of State, Treasury, War, Navy, Agriculture, Interior, Commerce, Labor, the Attorney General, and the Postmaster General shall be entitled to occupy seats on the floor of the Senate and House of Representatives, with the right to participate in debate on matters relating to the business of their respective departments. They shall attend the opening of the sittings on Tuesday and Friday of each week in the Senate, and on Monday and Thursday of each week in the House of Representatives, to give information asked by resolution or in reply to questions which may be propounded to them under rules of the Senate and House.

S. J. Res. 140, Amending Constitution.—Introduced by Mr. Gore, referred to the Committee on the Judiciary, amending the Constitution by providing that no person other than a citizen of the United States shall be entitled to vote for Senators and Representatives in Congress or for electors to choose a President and a Vice-President when such electors are chosen by direct vote of the people.

Safety Section Gets Results

Records compiled by the Safety Section of the Division of Operation of the United States Railroad Administration show that during the first ten months of 1919 (January to October, inclusive) 1,107 fewer employees were killed and 25,930 fewer employees were injured than during the corresponding period of 1918.

As the Safety Section had really only been organized in time to begin functioning in January, 1919, these figures give concrete evidence of what can be accomplished by teamwork in the application of safety practices, as in other things. The tangible results are that during those ten months over eleven hundred men were spared to their families and their country and over twenty-five thousand men avoided unnecessary suffering or disfigurement.

FRANKLIN DISCUSSES DUTY PROPOSED FOR TUNGSTEN

During the Senate hearing on tungsten ores, an interesting colloquy took place between Nelson Franklin, representing the ore producers, and B. F. Witbeck, a manufacturer of tool steel. The discussion was as follows:

MR. FRANKLIN. I should like to ask the witness a question or two. It appears in the hearings before the Ways and Means Committee of the House that the ore producers were not familiar with the cost of manufacture of high-speed steel. They were familiar with the cost of the manufacture of the ferrotungsten and the compensatory duty as provided in the bill for ferrotungsten is all right—that is conceded by the witness, is it not?

MR. WITBECK. Approximately, I should say; yes, sir.

MR. FRANKLIN. We did not figure on any other operation having to take place to make the high-speed steel—that is, the people who were fathering the bill at the time did not feel that way. For argument sake, we will say—I, as representing the ore producers, have letters from them to that effect, and telegrams—that while the duty as provided as compensatory on high-speed steel was not sufficient in the original bill as passed by the House, and we are perfectly willing that that should be made compensatory, and we so stated in our hearing before the Finance Committee of the Senate.

SENATOR CURTIS. The amount asked by the first witness would be satisfactory?

MR. FRANKLIN. We think it is too much. We think \$1.50 is plenty.

SENATOR CURTIS. Instead of \$1.60, you would make it \$1.50?

MR. FRANKLIN. Instead of \$1.60 as stated by the two witnesses. In other words, Senator, if the producers of high-speed steel in this country cannot sell their product on account of the tariff on ore, we would then be out of a market for our ore, and there would be no necessity for this tariff. We want in that bill what would make it compensatory to the high-speed steel people, and we are perfectly willing that \$1.50 should go in there, and I am authorized to say that.

Now, I would like to ask Mr. Witbeck a question. You gave some figures there to the effect that 15,000 tons was the requirement of tungsten ore in the United States. Those figures are entirely wrong, and therefore it would change all your other figures as to the amount it would cost this country in the tariff on ore. The figure is really only 7,500 tons, the normal requirements—it actually is not that, but I am willing to concede 7,500, although it does not reach that amount.

MR. WITBECK. I am not willing to concede you are right. I think you are basing that on a half year's consumption.

MR. FRANKLIN. No, I am not; I am basing it on 1920 requirement.

MR. WITBECK. I think we can furnish you with figures to prove that I am correct.

SENATOR CURTIS. You go ahead and furnish your figures to the committee, and then Mr. Witbeck can look it over afterwards.

MR. FRANKLIN. I am satisfied you will find that 7,500 tons per year for the next 10 years would be the average requirement.

SENATOR CURTIS. Let him furnish any figures he pleases, and then you can submit counter-figures.

MR. WITBECK. I hope that is not so.

MR. FRANKLIN. What do you do with the scale that comes from your tungsten?

MR. WITBECK. We do not do anything with it.

MR. FRANKLIN. Do you not recover any tungsten from your scale?

MR. WITBECK. We have not found out how to do it; we hope someone will show us how.

MR. FRANKLIN. I could show you how.

MR. WITBECK. At a profit?

MR. FRANKLIN. Yes sir. You should recover some tungsten out of your scale.

MR. WITBECK. You undoubtedly can recover tungsten out of the scale, but can you do it at a profit?

MR. FRANKLIN. You can do it at a profit.

MR. WITBECK. We think it is doubtful whether you can recover tungsten out of the scale at a profit at the present price of tungsten.

MR. FRANKLIN. Right now at the present price of tungsten, it would not be as much as if tungsten was twice as high, I will admit that, but you can recover tungsten and eliminate a good deal of that loss. Supposing we should, according to your argument, close down all the mines in the United States. What would become of this country in event of war with China? You spoke of war with Japan.

MR. WITBECK. I think if you were to take some of the \$12,000,000 you made in 1916, the \$4,000,000 that you made in 1917, the \$6,000,000 you made in 1917, and \$5,000,000 made in 1918—I mean the profit above cost that you derived from that—I think you could do a tremendous amount of developing in the United States, and it seems to me that if the people of the United States are to pay \$30,000,000—

MR. FRANKLIN (interposing). They are not going to pay it.

MR. WITBECK. We think they will pay it—

MR. FRANKLIN (interposing). No.

MR. WITBECK (continuing). As a result of this bill.

MR. FRANKLIN. That is disputed.

MR. WITBECK. We could set a very small part of that aside as a sinking fund for tungsten mine development in the event of war.

MR. FRANKLIN. That part is disputed about the amount it would cost the people.

SENATOR PHIPPS. You would have to get some of that money back which has been paid to the Government in the way of excess-profits tax, would you not? Just like your high-speed tool industry, the mines had to account for their profits and pay their taxation accordingly.

MR. FRANKLIN. You are not familiar with mining—you are not a mining engineer, are you, Mr. Witbeck?

MR. WITBECK. I am familiar with mining, but I am not a mining engineer.

MR. FRANKLIN. You now nothing can be produced unless it is opened up and developed?

MR. WITBECK. That is true.

MR. FRANKLIN. I am here to state as a practical mining operator of 40 years' experience that you cannot produce a mineral unless it is developed and opened up, and we do not know what the big resources are in this country in tungsten until the mines are opened up.

MR. WITBECK. I was simply answering the questions you asked me. You did not ask me the cost of developing to find out how much we did have. That would be a comparatively small expense, if the United States wanted to prepare and find out how much we would have in case of war; they could block out three or four years' needs.

MR. FRANKLIN. You can not block it out; you have to take it out. If you were familiar with mining operations you would know that.

MR. WITBECK. They could block out sufficiently so that they would not have to take any chances in event of war.

MR. FRANKLIN. If you were familiar with mining operations you would know that statement is not true. If you block it out and leave it there it will cave in.

SENATOR CURTIS. We would rather each side would state its case, and then let the committee work it out.

MR. FRANKLIN. I claim his figures are wrong, Mr. Chairman.

SENATOR CURTIS. You can put in any answer that you please in the way of figures, if figures are necessary. I have not had time to go over the figures to see whether they are or not.

MR. FRANKLIN. I simply want to say this: He did make a positive statement that we could not produce the tungsten required in this country, and that if we did go ahead and take out this tungsten we would not have any more tungsten in case of war. I claim that is not true.

SENATOR CURTIS. I think that is a question in regard to which each side should make a showing.

MR. FRANKLIN. I have tried to ask him questions that would prove my contentions.

MR. WITBECK. I am basing my figures on the United States geologists' reports.

A Financial Creed for 1920

I believe in the United States of America.

My opportunity and hope depend upon her future.

I believe that her stability and progress rest upon the industry and thrift of her people.

Therefore I will work hard and live simply.

I will spend less than I earn.

I will use my earnings with care.

I will save consistently.

I will invest thoughtfully.

To increase the financial strength of my country and myself I will buy Government securities.

I will hold above barter the obligations my country thus incurs.

I will do these things to insure the greatness of America's future.

TRADE COMMISSION SENDS LETTER TO COAL OPERATORS

"The Federal Trade Commission, pursuant to a resolution adopted on December 15, 1919, under the powers conferred upon it in Section 6, Paragraphs (a) and (b), of the Federal Trade Commission Act, approved September 26, 1914, and in consideration of a special appropriation by Congress for such purposes, requires your company to report your monthly costs of production and other data as specified, in the form prescribed, in the enclosed schedule and instructions relating thereto.

"Said reports, except as to Balance Sheet, are required monthly for each month of the calendar year 1920, and until further notice is given you, and are required to be mailed not later than the twentieth day of the month succeeding the month for which the report is made; the report as to Balance Sheet is required as of the close of business December 31, 1919, or as of the close of your last fiscal year.

"If the mines are operated by you in more than one field or district, a separate cost report is required for each field or district. A separate cost report may be filed for each mine, if you so elect, provided that you file also a composite cost report for each field or district.

"Your attention is called to the fact that the above-mentioned law provides penalties for delay or failure in the making of reports to the commission, or for making false reports."

Technical Employment Service

The California State Mining Bureau has inaugurated a technical employment service which is offered free of charge in the hope that practical benefit will result to those interested in the mineral industry of this state. A system has been installed whereby records will be kept of technical men who desire positions and of vacancies existing in the staffs of mining or oil companies, plants or reduction works. Companies or individuals are cordially invited to call at any of the offices of the State Mining Bureau or communicate by mail or wire, and every effort will gladly be made to satisfy their wants.

According to State Mineralogist, Fletcher Hamilton, the bureau in undertaking this service has no intention of encroaching on the field of various private and public employment agencies which are already operating. It will not be feasible to attempt to extend this service to labor in general, but it is believed that a real need exists whereby operators who require technical help, such as engineers, geologists, superintendents, surveyors, assayers and others, will be in a position of knowing where they can find those available for technical work, and vice versa.

It is of course understood that the State Mining Bureau will be in no position to make recommendations in any given instance. It will, however, be glad to assist in every possible way in establishing contact between the job and the man, leaving the final arrangements to the contracting parties.

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Iron Ore in Spain

Iron ore was mined in twenty-one provinces in Spain in 1917, among which Viscaya led with 2,464,694 metric tons, while Almeria stood second with 834,522 tons. The total amount produced in 1917 was 5,551,071 metric tons, which is considerably below the average for ten years preceding. The annual production of Spain for a few years before the war amounted to 9,000,000 tons, of which more than 8,000,000 was exported, chiefly to England and Germany, in the ratio of about 2 to 1, the ore going to England supplementing England's domestic Cleveland ore. The Viscaya field furnishes high-grade Bessemer ore that has been in continuous demand, particularly in England, while the Bilbao field has supplied Germany with some of its product. Due to the war, the German market was eliminated, and the decreased shipping

facilities available could not make up the deficit in shipments to England. Hence the lowered output of Spain in the last few years.—Bureau of Mines.

Silver Exports

For the first eleven months of 1919 the value of silver exported to India amounted to \$109,180,718, while China's share (including Hong Kong) was \$60,125,178. For the first seven months of 1919 the proportion was \$108,273,177 to India and \$17,458,606 to China and Hong Kong. This gives an idea of how the Chinese demand has grown during the past few months, more than trebling itself, while the Indian demand has increased only about one per cent. The large amount of silver shipped to India under the Pittman Act of 1918 ceased in May, 1919, and it is part of this silver which figures so prominently in the totals for 1919.—U. S. Bureau of Mines, Reports of Investigations.

ELECTS OFFICERS

The annual meeting of the Oklahoma, Kansas and Missouri Chapter of the American Mining Congress was held at Joplin, Mo., Tuesday evening, January 22.

Edgar Wallower was elected governor; Fred Bendelari, Charles E. Schwarz, and D. C. Corner were elected vice-governors. The Board of Directors elected is as follows: P. B. Butler, George Coleman, A. M. Gaines, Sidney Davis, J. W. Hoffman, T. J. Franks, C. F. Dike, Frank Weeks, Frank Wallower, T. F. Coyne, and Victor Rakowsky.

Sells Much Surplus Sulphur

The War Department has sold more than 161,000,000 pounds of sulphur, declared surplus since the signing of the armistice. About 14,872,000 pounds of sulphur, surplus and available for sale, is still in possession of the War Department. It is located at the Old Hickory Powder Plant, Jacksonville, Tenn., at Little Rock, Ark., and at Hopewell, Va.

May Purchase Bauxite Mines

It is reported that the Italian Government is arranging to purchase the large Abruzzi and Tannium bauxite deposits, to be worked by the government. The probable intention is to manufacture aluminum wire to be used in place of copper in the electrification of the Italian railways. Italy's resources of bauxite are sufficiently large to permit production on a large scale.—U. S. Bureau of Mines, Reports of Investigations.

The twenty-second annual meeting of the Canadian Mining Institute will be held at Toronto, Canada, Monday, Tuesday, and Wednesday, March 8th, 9th, and 10th.

Mr. C. W. Knight, Bureau of Mines, Toronto, Canada, is secretary, and members wishing hotel reservations should communicate with him at their earliest convenience.

(Continued from page 79)

SAYS CONTRACT DISREGARDED

"Our contracts," said Mr. Penna, "are not respected, neither generally nor locally, and the reason is because the miners are irresponsible as an association. We are going to ask this commission that it will, in its findings, advise the Congress of the United States, to require in the interests of collective bargaining—that people and associations organized for such purpose, and entering into such pursuits, shall qualify—ask Congress to enact the necessary laws to require certain qualifications."

While recognizing the rights of the laboring man to unionize, Mr. Penna said that with organization comes the contract, and with the contract "there comes, or should come the responsibility necessary to make that contract sacred, or at least, to enforce the contract by penalties for persons who would respect nothing else."

AGAINST REMOVING PENALTY

Arguing against the removal of the automatic penalty clause, Mr. Penna said it was a necessity, to prevent mine workers from closing mines by striking in violation of their contract. To do away with this clause, he said, would remove the only semblance of liability to keep their contracts which the miners have at present.

Mr. Penna attacked the "check-off" system, by which the operators collect dues for the mine workers' officials from the miners' pay. He said the operators desired the abolition of this system "once and for all."

SAYS "CHECK-OFF" NOT NEEDED

"This system was introduced," said Mr. Penna, "for the purpose of enabling the mine workers' officials to unionize their force to the end that they would be able to enforce contracts when they make them. The very purpose for which the institution was created, having failed and disappeared entirely, there is no necessity longer for the system."

Mr. Penna objected to the present system of writing into the contract between miners and operators, sums to be paid for house rent by miners and the price charged them for their domestic coal, as savoring of paternalism, and asked the commission to fix equitable methods of dealing with these things. He also asked the commission that the officers of the United Mine Workers be required to assume responsibility for enforcing the terms of contracts *within* various districts; at present, he pointed out, the union officers are only obligated to enforce contracts *between* districts.

CALLS DEMANDS "INSATIABLE."

Speaking of the miners' demand that all local differences shall be returned to the respective districts for settlement, Mr. Penna said that the miners desired to get all they could "out of this commission in the way of wages, then they want the bars thrown down so that they can go home and, by the use of what they term their 'economic power,' they can shut down the coal mines and

can demand, at the hands of the operators, still further increases."

He said that the operators have been prevented by the union from introducing in the mines new machines that would lower the cost of coal production, because no scale had been made to cover the use of these machines. He asked for authority to introduce time-clocks in the mine.

MAZE OF DETAIL PRESENTED

Mr. Penna concluded by saying that if the commission undertook to disturb the matter of differentials, local differences and internal working conditions, it would get into a "maze of uncertainty and a vast amount of work," and he doubted if it could do a better job in dealing with these numberless interwoven details than the mine workers and the operators have done during their thirty-three years of collective bargaining.

At the conclusion of Mr. Penna's presentation adjournment was taken until Monday, January 19.

WEEK ENDING JANUARY 24, 1920.

In the second week, ending January 24, of the hearings before the Coal Commission appointed by President Wilson to inquire into the bituminous coal situation, the operators of the Central Competitive Field completed their replies to the preliminary demands made by the miners' representatives in the earlier days of the session, while the miners took a day to reiterate and amplify some of the points which they had brought up before.

The operators' viewpoints were expressed by Tracy L. Guthrie for the Pittsburgh district; C. E. Maurer for the Ohio fields; P. H. Penna for the Indiana operators and T. T. Brewster for Illinois. Philip Murray, president of the Mine Workers of Pennsylvania; J. W. Savage, representing several districts in Ohio, and Frank Farrington, president of the Illinois miners, spoke for their side.

The operators went into the questions brought up by the miners last week, each explaining how his particular district would be affected by the new demands of the miners. The operators opposed arguments advanced by the miners, involving many points reaching into the fundamentals of working agreements, arguing that many of these points had already been covered in agreements that had run for years. To upset these fundamentals, the operators argued, would mean overthrowing basic agreements that had been reached after long negotiation.

As in the first week of the hearing, the operators emphasized the point that the real issue before the commission was the wage scale, and that differentials and other matters projected by the miners have no place in the controversy.

NO EXTRAVAGANT PROFITS

During the hearings this week, which were confined to Monday and Tuesday, with only a brief session on Wednesday, the operators indicated that they would produce figures to controvert the claims of the miners that they have been getting low wages, working ten or

more hours a day and that working conditions in the mines are injurious to the miners' health. Figures will also be offered before the commission to show that the operators' profits have not, as claimed by the miners, been extravagant.

Both the miners and the operators will produce statistical data in the hearings next week, in support of the claims made by each side with regard to amount of wages earned, hours and days actually worked. The operators promise figures to show that the miners could, if they wished, work more days than they do.

RESPONSIBILITY OF UNIONS

In answer to the suggestion of the operators, made last week that the commission devise some system whereby officials of the International Unions could be held responsible for carrying out contracts and agreements with the operators. Mr. Farrington, representing the miners of Illinois, took the attitude that such a thing was an impossibility. It would result, he said, in the "congestion of the machinery of the International organization," and would end by causing long delays in the settlement of small questions, thus raising tremendous discontent among the men.

Mr. Penna, for the operators, maintained that, as it now stands, one side is bound and the other side cannot be held responsible for carrying out the terms of signed agreements. Mr. Penna has urged action by Congress to make such contracts binding on both parties.

OPERATORS' REBUTTAL

Among the points stressed by the operators in their rebuttal of the arguments presented by the miners were the question of the payments for the removal of slate of varying degrees of thickness from the coal seams; the difference in basic rates of pay for men employed on thick-vein seams and those who work on thin coal veins, payment for the use of electric cap lamps, and other equipment and safety devices; and the "docking" clause which provides a penalty for the loading of impure or "dirty" coal.

GUTHRIE TAKES UP DEMANDS

At the opening of the session on Monday Mr. Guthrie presented the Pittsburgh operators' reply to the five points raised last week by the miners of that district, embracing specific demands. He first took up the demands for payments for the removal of slate.

Handling slate, he stated, had always been taken into consideration in fixing the tonnage scale rate. Several years ago, he said, an agreement had been reached in which the maximum thickness of slate which the miner should take care of under the tonnage scale rate was placed at twelve inches and, for thicknesses over that, additional compensation was allowed.

"In consequence," said Mr. Guthrie, "if the miner wants separate pay for handling the slate the wage scale per ton of coal should be reduced. Otherwise the separate payment is nothing but an advance in the wage rate."

Regarding the elimination of the differential wage rates between thick-seam and thin-seam

coal veins, Mr. Guthrie stated that the differences in rates were established to create a more nearly equal earning capacity for the miners in the two types of mines.

DIFFERENTIAL IS JUSTIFIED

"It is perfectly obvious," he said, "that the miner working in the thick coal has an advantage in earning power over the miner who works in the thin vein. We will submit statements showing the earnings of miners in both thick and thin-vein districts which establish the proposition that the present differential is justified, and if disturbed, the wages of the thin-vein miner will fall and as a result the miners will seek all employment in the thick-vein mines. This will finally result in disadvantage and dissatisfaction for the miners and will work unnecessary hardships upon the operator in the thin-vein districts."

In answering the miners' demand that the operators furnish electric cap lamps, free of charge, Mr. Guthrie pointed out that the miner had furnished his own light from the earliest days of the industry just as he has furnished his own pick, shovels, and drills.

CAP LAMP AN AID TO MINER

The electric cap lamp was introduced, Mr. Guthrie said, to add to the mine-worker's safety, convenience, and efficiency, thereby increasing his earning power. Five cents a day is charged for electric cap lamps and Mr. Guthrie pointed out that it would cost the miners more than that to provide the lamps previously used. The demand was characterized as showing another instance on the part of the miner to procure an additional advantage which, in final analysis, has the same effect as a wage increase.

FREE POWDER

Taking up the next demand, for free powder, Mr. Guthrie said that the miner has always furnished his own explosives and that his wage per ton of coal covered this incident in his cost of mining. He characterized the demand as "a subterfuge to increase the wage by withdrawing from it one of the elements of cost which it has always covered."

"If the miner," said Mr. Guthrie, "is to be relieved of part of the work which he is already paid for doing, under the present scale; if he is to be furnished, free of charge, with equipment and supplies which, under this scale, he is paid for furnishing himself, then the scale basic rate should be reduced to cover these items; otherwise, this is granting an increased wage by an indirect method. The miners are seeking a wage increase which is concealed from the public view."

MAURER TELLS OF OHIO CONDITIONS

Coal mining conditions in the state of Ohio were explained from the operators' standpoint by Mr. Maurer, who said that no other state had to meet such severe competition.

"In 1914, working 108 days, Ohio produced 18 million tons of coal; and in 1919, the state produced 47 million tons of coal," said Mr. Maurer, commenting on the tremendous de-

velopment which lay dormant for so many years on account of competitive conditions.

UNDUE BURDEN ON OHIO

Mr. Maurer declared that "an undue burden on the coal production of the State" might, with the return of normal times, put Ohio back where it was in 1914-16 "when Mr. Moore (the miners' representative) told you he was feeding men in Ohio."

Taking up the demand of the miners for a rearrangement of the system of payment for removing slate, Mr. Maurer stated that payment for this work had been included in the mining rate for forty years.

"PUT DISTRICT OUT OF BUSINESS"

"An increase of 10 cents per foot for mining slate would mean an increase of 10 cents a ton on coal, adding \$1,500,000 to the normal cost of coal in Eastern Ohio," said Mr. Maurer, "and this would put the district out of business in all kinds of times, normal, war, or times like we have today."

As to the earning capacity of the miner, Mr. Maurer said no other state, except Utah, could show a higher production rate in five-foot seams of coal than Ohio.

EXTRA PAY FOR THE MINERS

Mr. Maurer went on to tell the commission that miners receive pay for other work than mining the coal, on a tonnage basis. This extra pay, among other things, includes work for brushing slate and for yardage. He introduced a table to show the extra pay received in the Ohio fields. In this table, in consecutive order appear these items, showing the pay received for mining and for extra work for one month:

Miners' check No.	Mining	Extra pay	Total for one month
177	\$178.15	\$6.43	\$184.58
179	123.58	1.82	125.40
181	210.50	20.00	230.50
182	106.97	13.46	120.43
183	202.59	.56	203.15
184	65.48	3.18	68.66
			(½ month)
185	102.04	9.60	111.64
188	160.56	.55	161.12
189	152.95	38.59	191.54

SHOWS MINERS IDLE

To substantiate the operators' claim that many miners remain idle when the mines are working, Mr. Maurer offered this table, prepared from the records of the Great Lakes Coal Mining Company:

STATEMENT SHOWING NUMBER OF MINERS WORKING ON DAYS MINES WORKED, AND NUMBER OF MINERS IDLE, NOT REPORTING FOR WORK DURING YEARS 1918 AND 1919.

1918	Miners working	Miners idle	Per cent miners idle
January.....	10,890	1,967	
February.....	9,540	1,169	
March.....	10,544	1,186	
April.....	11,775	2,113	
May.....	11,753	2,022	
June.....	12,353	2,243	
August.....	12,533	2,077	
September.....	11,086	1,837	
October.....	11,308	3,269	
November.....	9,496	2,915	
December.....	9,342	2,588	
Total for 1918.....	133,070	26,169	16.4

1919.			
January.....	5,602	1,206	
February.....	1,451	403	
March.....	2,790	140	
April.....	8,986	1,304	
May.....	11,588	2,322	
June.....	12,058	1,810	
July.....	11,364	2,284	
August.....	7,634	1,004	
September.....	7,745	1,281	
October.....	9,845	1,686	
November.....			
December.....	2,608	1,008	
Total for 1919.....	81,671	14,268	14.8
Grand total.....	214,741	40,437	15.8

WOULD "DOUBLE COAL PRICE"

Mr. Maurer took up the demand for a six-hour day instead of eight hours, by the miners declaring that it would double the price of coal in Ohio.

"Furthermore," he said, "the economic effect of the decision of a commission of this nature, appointed by the Government, would have a far-reaching effect on all the industries of this country, extending out into the farming industry where, today, the problem is how to get enough men under the shorter hours to sow and gather the crops and foodstuffs necessary to our support."

WAGES INCREASED 84 PER CENT

Going into the 14 per cent increase recently granted the miners, and the increase in the cost of living, estimated at 79 per cent by Dr. Garfield, former Fuel Administrator, Mr. Maurer presented figures to show that day labor, which constitutes 40 per cent of the mine labor in Ohio, received \$2.64 a day in 1916 and now receives \$5.70 a day. The machine miner, who gets out 90 per cent of the coal, received 47 cents a ton in 1916 and now gets 81 cents a ton. This is an average increase, he pointed out, for both classes of 84 per cent compared with the estimated cost of living increase of 79 per cent.

PENNA TALKS FOR INDIANA

Mr. Penna, for the Indiana operators, put in a rebuttal to the miners demands as affecting his district.

"In Indiana," said Mr. Penna, answering the demand for payment for slate removal, "slate up to 6 inches in thickness is now included in the mining rate. Slate mining over 6 inches is paid for extra."

It was unnecessary to bring up the slate question before the Commission, declared Mr. Penna, who said that in Indiana, the president of the United Mine Workers, and he himself, as secretary for the Coal Operators Association, had absolute authority to settle any points of dispute relating to it.

ASKS STEWART TO SUBSTANTIATE

Mr. Penna called on Mr. Stewart, president of the Indiana Mine Workers' Union, to furnish evidence to support charges made by him at a previous hearing, when Mr. Stewart claimed that some operators had sold bone coal, mixed with other coal, during the war, contrary to the miners' and operators' contract, and Mr.

Penna demanded the names of any operators who had done this. Later in the day, Mr. Stewart explained that he had not meant to accuse the Indiana operators of being dishonest and that the loading of coal had been done under a "careless system for which the mine managers were responsible." He gave the names of five coal companies who had loaded bone coal. At Mr. Penna's suggestion the operators named will be called before the Commission.

Mr. Penna characterized Mr. Stewart's charge as having been "loosely drawn."

ADVANCE AND THE BONUS

Mr. Penna commented upon the charge made by miners' representatives last week that some operators had failed to apply the 14 per cent wage advance to bonuses paid the miners. He suggested that if Mr. Stewart, instead of bringing up the matter before the commission, had taken it up with him, it would have been settled at once, so far as the Indiana miners were concerned. He was in agreement, he said, with Mr. Stewart on the point that any increase in wages should be figured on the regular scale of prices, plus any bonus that was paid.

Defending the Indiana operators against the charge made by Mr. Stewart last week of violating the laws of the State in not paying the miners weekly, Mr. Penna said that the Indiana operators "are not law violators" and that no law ever had been passed requiring wages to be paid weekly. The law in question, which he characterized as the work of "time-serving politicians," simply allowed the miners to "ask, petition or request or agree to a weekly pay time with their employers" and he pointed out that it is not necessary to have an act of the legislature to allow them to do this.

REPLIES TO FARRINGTON

Mr. Brewster, for the Illinois operators, followed Mr. Penna, questioning the figures furnished by Mr. Farrington, president of the Mine workers of Illinois, which were submitted as indicating the average number of days worked per mine per year. Mr. Brewster stated that the figures did not fairly represent the number of available days of work for a majority of the mines and, consequently, for a majority of the men. He pointed out that in almost every county in the Illinois fields there are several mines that can work but little, if at all, under the stress of competition during spring and summer. Yet the men who work in these mines are not necessarily idle during the slack season, he said, for they may be employed elsewhere during the long periods of regular suspension of mining operations.

SEASONAL DEMANDS

The bituminous coal industry has always been and always will be subject to the fluctuation of the seasonal demand, said Mr. Brewster, and this condition must be accepted by all those who identify themselves with the business whether they be owners, managers, or mine workers.

So far as the differential between machine and pick mining was concerned, the removal of which was asked by the miners, Mr. Brewster pointed out that the matter had been referred to the Illinois State Arbitration Board in 1899.

"In 1910," said Mr. Brewster, "the miners struck for the abrogation of the differential and a compromise was affected only after six-month's time."

MINES WITHOUT MACHINERY

Because of the trouble about differentials, declared Mr. Brewster, a great many Illinois mines were still operated without machinery which, of itself, creates a condition not conducive to the safety and efficiency of the miners.

A differential of 10 cents a ton is inadequate, stated Mr. Brewster, to reimburse the Illinois operators for the cost entailed in the investment of mining machinery, pointing out that the cost of installation of machinery, the wire, pipes, supplies and repair parts necessary for up-keep have increased over 200 per cent and yet no increase had been allowed the operator in the amount available for this up-keep.

PAY FOR HAULING MINERS

Taking up the miners' request that the commission recommend requiring the operators to haul the men from the shaft bottom to the working face, and return, on the miners' pay time, Mr. Brewster stated that where the workings were extended the men were now transported to point near the working face, either by established custom or surreptitiously, in violation of company rules, dictated by motives of safety. If the matter were to be considered by the commission, however, Mr. Brewster asked that it be provided that the miners be required to stay in their working places until leaving time, performing the work, and not rush up to the surface any hour they wished to quit.

MINERS' NEW DEMANDS

The second day of the hearings, January 20, was devoted to the miners, who reiterated the demands previously made and brought forward some new material to substantiate their claims. The miners' points were presented by Mr. Murray for Pennsylvania; Mr. Savage for Ohio, and Mr. Farrington for Illinois.

Elimination of the differential in pay rates between thick and thin seam mining was again asked for by Mr. Murray on the ground that this would give the miners a more equal distribution of working days throughout the year. He asserted that in some mines the miners were working on thin-seam coal at thick-seam rates which cut their earnings very materially.

"An examination of the figures," said Mr. Murray, "will show that miners in the thick-vein districts work many more days per year than the men employed in the thin-vein fields, which have a higher cost of production and consequently more shut-down days."

PAY FOR SLATE REMOVAL

Mr. Murray disputed the operators' claim that payment for the removal of thick slate is

taken care of in the mining wage scales. He declared that the same price per ton is paid for coal mined where the roof is "slick" and no slate has to be removed, as where the 12-inch maximum is required to be taken out. Twenty-five per cent of the miner's time is spent in slate removal, he said, for which no payment is allowed in the Pittsburgh district.

Commenting on the fact that the miners are required to pay the cost of introduction of safety devices, Mr. Murray said that these should be borne by the industry. He offered to produce figures tending to show that the safety devices had resulted in lowering the men's earnings, thus depriving them of the benefits which they might expect would come to them as a result of improvement in mining methods.

SLATE AND MINE CARS

That handling of slate is included in the price paid for mining a ton of coal, as claimed by the operators, was questioned by Mr. Savage, for the Ohio miners, who said that the price paid for mining a ton of coal was based on mining a clean seam. Furthermore, he stated that in Ohio, outside of the Eastern District where there was a "second slate formation" every scale district granted pay to the miners for handling slate, no matter how thick it was. Harmony in Ohio, he insisted, would not appear until the miner received adequate pay for doing this work.

Some of the practical difficulties in handling mine cars were touched upon by Mr. Savage who said that, where mules were used, the cars were sometimes run off the track and the miners required to stop work, unload them, and replace them on the track before they could proceed with their mining. He asked that the driver be made responsible for handling the car.

WANTS UNIFORM SCALE

Mr. Savage injected a local note when he demanded that the operators in the Pomeroy and Jackson fields be required to pay the same scale day wages as was paid in other parts of the state. In adjoining districts in low coal seams the regular Hocking scale, or basic scale, for the competitive field was in force, he said, and in the low coal seam in Northern Ohio the operators paid the basic price for day labor.

"There is no reason," he asserted, "why the operators in the Jackson and Pomeroy fields cannot pay the maximum scale that is maintained in other parts of the state."

DISCUSSES "DOCKING"

Mr. Farrington, who followed Mr. Savage, after saying that it took men who work in the mines sometimes as much as two hours to get out into the air after they have finished their work, hit at the "docking" clause for loading impure or "dirty" coal, which the miners want rescinded and the operators want made stronger.

"I never knew a miners' official," said Mr. Farrington, "who had any desire to protect men who loaded dirty coal wilfully. The mines producing the cleanest quality of coal are going

to get the business, as against the mines where the men load an impure or dirty quality. Because of that condition it is the desire of every official to see that the men load clean coal because it is to our advantage to have clean coal produced and loaded.

"But I have in mind a mine in Illinois where there are fourteen veins of impurities in the coal vein. The men load the cars in artificial light and the company examines the coal in daylight. If they find what they consider a sufficient quantity of impurities to warrant the application of the penalty it is applied and the men have apparently no redress.

"We hope the commission will give careful consideration to the creation of a docking clause which will give the workers a modicum of protection."

ASKED FOR NEW FIGURES

At the close of Tuesday's session, Chairman Robinson asked the operators to furnish figures showing the amount of coal sold since the 14 per cent wage advance went into effect on contracts made early in 1919.

The session Wednesday was brief. Figures on their side of the wage and cost of living questions were promised by John L. Lewis for Tuesday, January 27, to which date the commission took a recess.

OPERATORS FINAL DATA

After the miners have submitted their data the operators, it was decided, would offer their own data in their purpose to show that the miners wages are adequate and that the operators profits under the 14 per cent advance have almost entirely disappeared.

SESSION OF JANUARY 27

Upon the resumption of the hearings, before the commission of three, appointed by the President to investigate the bituminous coal industry, Don Rose, an attorney of Pittsburgh, representing the operators of the Freeport district, denounced the demands of the miners for a 60 per cent wage increase along with a 6-hour day and a 5-day week as "unthinkable and un-American."

Mr. Rose told the commission that the operators could not believe that the miners' organization seriously advocated the six-hour day with a five-day week, and he declared that such a proposition meant "industrial chaos for the nation."

"As we view it," said Mr. Rose, "the miner's demand for a six-hour day and a five-day week, coupled with his demand for time and a half for overtime and double time for Sundays and holidays, seeks to achieve two results: first, an indirect increased wage; and second, limitation upon production. Under the Lever law both these propositions are illegal. We believe them to be un-American. We regard them as an attempt to make of the miner a favored class."

Acting-President John L. Lewis of the United Mine Workers, upon the conclusion of Mr. Rose's statement, protested against the characterization of the miners' demands as un-American.

"We do not understand that the Americanism of the miners is on trial," said Mr. Lewis.

At the outset of the hearing Chairman Henry M. Robinson announced that the commission would go into the manner in which the recent 14 per cent wage increase to the miners had been applied.

BITTNER SPEAKS FOR MINERS

During an oral statement at the hearings Tuesday and Wednesday, January 27 and 28 in explanation of the various statistical exhibits submitted for the miners, Van H. Bittner of Pittsburgh first laid stress on the finding by government authorities that the cost of living had increased 85 per cent since 1913, and then declared that the miners had not received wage increases commensurate with the advance in the cost of living. Mr. Bittner submitted an estimated budget for a family of five, which with an added \$140 for explosives and smithing, he said, should amount to \$2,243.94, for a miner and his family per year. Mr. Bittner followed this with summaries covering coal production tonnages, selling prices, profits, net earnings and deductions as to their bearing on the relative amounts paid to the miners for their labor.

REFUTES MINERS' CHARGE

Charges that certain Indiana coal operators were permitting, without docking from the miners' wages, the breaking up of impurities in coal and loading them with coal to be sold as pure, contrary to their agreements, were refuted by Phil H. Penna, secretary of the Indiana Operators' Association, who filed with the commission a number of affidavits from mine owners, superintendents, and room bosses.

In the case of one mine, charged with the practice, Mr. Penna said he had found that its owner was dead, and for that reason the mine had not been operated since the middle of 1918.

New demands of the miners of the Freeport, Pa., district for abolition of the differential between the thick and thin vein mines for pay for removal of "bone" coal, and free supply of powder and electric cap lamps were made by President Philip Murray of the Pennsylvania bituminous miners. Mr. Murray also argued for the basic claims of the miners of the Central Competitive Field a 60 per cent increase in wages, a 6-hour day and 5-day week.

"UN-AMERICAN" SAYS ROSE

In rejoinder, Mr. Don Rose of Pittsburgh, representing the Freeport, Pa., operators, submitted the miners' demands to a searching analysis. He declared that the miners' contentions for abolition of differentials and the supply of materials free to the miners, heretofore incident to his work, were, in fact, indirect wage demands. As to the demands of the miners as a whole, Mr. Rose asserted that if granted, they "would put a price upon the cost of coal that would stagger even the American people," creating of the miner a "favored class." Mr. Rose said the demands were "unthinkable and un-American." To this statement Acting

President John L. Lewis of the United Mine Workers objected, saying that the Americanism of the miners was not on trial.

Frank Farrington, president of the Illinois Mine Workers, submitted a proposed draft of a new agreement for the employment of hoisting engineers in the Illinois mines. Resolutions from a number of Ohio local unions relating to demands were also read into the record of the commission.

HOW APPLIED

Chairman Robinson announced that the first hearings of representatives of both sides in the outlying districts would not be reached until Thursday, February 5. Mr. Robinson also stated that the commission would consider how the recent 14 per cent average wage increase granted the miners, has been applied.

Chairman Robinson's statement as to the 14 per cent advance, made at the outset of the first hearing of the week, which began at 2 p. m., on Tuesday, January 27, was as follows:

"Requests from several districts have been presented to the commission for its determination of questions arising out of the application of the 14 per cent average advance.

"It is fair to assume that the President expected that the 14 per cent average increase would be applied by the operators and miners in a manner to stabilize the industry pending the survey and final award of the commission.

"In making its final award the commission will consider and determine the application of the 14 per cent average wage increase."

ARE COMPLYING

That the 14 per cent increase is being borne by the operators was made clear in a statement issued by Attorney General Palmer from the Department of Justice on January 20, which said:

"It is true that in some sections of the country a larger price is being charged for coal than that fixed by the Fuel Administration. This makes it appear as if the operators had added the 14 per cent increase in wages to the price of coal.

"I have no information that the 14 per cent has been anywhere added. Where the price is greater than the Fuel Administration's price, it is caused by the fact that the operator alleges that the coal was bought on contract before October 31, 1919, which contracted coal was expressly expected from the Government price by an order issued by Dr. Garfield on November 12."

MURRAY REITERATES DEMANDS

Following Chairman Robinson's statement on the 14 per cent advance, President Philip Murray, of District No. 5, United Mine Workers, appeared in behalf of the miners of the Freeport, Pennsylvania, district. Mr. Murray said his statement would be largely a reiteration of what had already been read into the record. He asked for the abolition of the thick-vein differential in the Freeport seam of the Pittsburgh district, claiming that it would bring with it a more satisfactory condition both from the competitive standpoint and from the standpoint

of the man's ability to earn wages in the Freeport thick vein as against the miners of the thin-vein Pittsburgh district. Working conditions in the two districts, he said, were practically identical.

REMOVAL OF BONE COAL

Mr. Murray said that the Freeport miners also requested payment for the removal of bone coal in the thick vein of the Freeport seam at the rate of 10 cents per inch per lineal yard for all wide work over 15 feet and 8 cents per inch per lineal yard for all narrow work 15 feet and under, these prices to apply to all working places. The Freeport miners also asked that powder be furnished them free of charge as well as electric cap lamps, and further contended that car pushing should not be done by the miners but that this should be done by mules or a motor haulage system.

For the operators of the Freeport district, Attorney Rose met the demand for the abolition of the differential, calling attention to the fact that when the miners organized this field their officials recognized at that time that the mining conditions as between the Freeport thick-vein district and the thin-vein district of the Pittsburgh field demanded the existence of the differential established.

NO CHANGE

"There has been no change in conditions since that time which would justify a different conclusion as to the justice and expediency of this differential," said Mr. Rose.

As to compensation demanded by the miners for removal of bone coal, Mr. Rose said that "the handling of this bone coal is and has always been one of the incidental duties of the coal miner in this seam. The doing of this work by the miner has always been one of the elements of labor considered in fixing this wage per ton."

CAP LAMPS AND POWDER

Mr. Rose pointed out that the initial cost and upkeep of the electric cap lamp is borne by the operator. Were the mines to revert to the old system under which the miners furnished their own lights, it would cost them more than the present charge of 4 cents per shift for use of lamps, said Mr. Rose. As to the demand for free powder, Mr. Rose said that the wage fixed per ton covered the cost of permissible explosives to the miner. He took the view that if explosives were furnished free they would be used extravagantly with the result that the quality of the coal would be impaired and safety conditions endangered. He called attention to the section of the agreement requiring miners to work two in a room, and said if they complied with the agreement there always would be two men available for handling empty cars.

INCREASE "UNTHINKABLE"

"This demand is, like all the rest," said Mr. Rose, "a concealed and indirect attempt on the part of the miner to get an increased wage, which the public will not see, to be paid again for work that he is now adequately paid for performing under his wage.

"As to the general demands advocated by Mr. Lewis, our position coincides with that already taken by the operators of the four states. A general advance of 60 per cent is unthinkable. The potential earning power of the workers in this industry is far above the wage commanded by workers in other industries of a kindred character. Those demands, if granted, would place the miner in a favored class by himself, with an earning power far above that of workers in other fields.

"UN-AMERICAN" PROPOSITION

"We cannot believe that the miners' organization seriously advocates a 6-hour day, with a 5-day week. It is an un-American proposition. If it is good for the miner it is good for the man in other walks of life. We believe that he does not hope for a 6-hour day unless there is coupled with it time and a half for over time, in which case he will work his eight or ten hours, as the case may be, and thus convert the grant of the demand into a wage increase.

"As we view it, his demand for a 6-hour day and a 5-day week, coupled with his demand for time and a half for overtime and double time for Sundays and holidays, seeks to achieve two results—first, an indirect increased wage; and, second, limitation upon production. Under the law we believe limitation of production to be illegal. We believe it to be un-American. We regard these demands as an attempt to make of the miner a favored class."

LEWIS PROTESTS

The allusion to the miners' demands as "un-American" was objected to by Acting President Lewis of the miners, who said "I do not understand that the Americanism of the mine workers is on trial before this tribunal. We yield not to the operators, nor to any other individuals in our allegiance to the American Government, the American flag, American institutions, and American traditions. We do not propose to be tried as to our allegiance to those principles and ideals, at the whim of every individual who may disagree with our arguments and our claims."

THE MINERS' DATA

A mass of statistical evidence intended to support the miners' claims for the wage increase, shorter hours, and other demands, was next introduced by Mr. Bittner, representing the National organization of mine workers.

After presenting figures from several sources to support the statement that the cost of living had increased 85 per cent, rather than the 79.8 as figured by Dr. Garfield, the former Fuel Administrator, in making his recent wage adjustment, resulting in the 14 per cent increase to the miners, Mr. Bittner demanded a wage "sufficient to maintain the worker on a level of health and decency."

The average earnings of miners from 1902 to 1918 were shown on large charts to substantiate the claim made by Mr. Bittner that the miners "were not securing earnings adequate to mere animal existence" and that it was necessary to

supplement the earnings of the father by taking in boarders or putting the children to work.

NO INTERMEDIATE ADVANCES

The rising cost of living between periods of wage adjustments, Mr. Bittner said, has resulted in great hardship to the miner in that, in these intermediate periods, he has been unable to obtain any increase.

The 60 per cent wage advance demanded by the miner was figured, Mr. Bittner stated, so as to cover the difference between the wage scale and the increase in the cost of living in the period between November, 1917, and December, 1919, when the miners had no increases but were forced to meet a constantly rising living cost. If the losses then sustained were spread out over the next 24 months and raises granted in addition, to bring the scale up to present living requirements the increase would amount to 60 per cent, he said, when figured on a tonnage basis.

WAGES IN OTHER INDUSTRIES

Increases in wages had been less in the mining industry than in other large industries, stated Mr. Bittner. He presented figures tending to show that the wages in the steel industry had advanced about 125 per cent, in railroads about 75 per cent, farm labor about 85 per cent, boot and shoe trade about 75 per cent, while in the coal industry 90 per cent of the workers who work underground had received only a 50 per cent advance over the wages of 1914.

QUOTES HOOVER ON SIX-HOUR SHIFT

Declaring that the miners' demand for a six-hour day and five-day week had been misconstrued by the public as an attempt to shorten the working period, Mr. Bittner said that it was really a request for the opportunity for more work. He quoted Herbert Hoover, former Food Administrator, in stressing this point by saying: "When Hoover was manager of the Durham mines in Northumberland, England, he said he would not work men over a six-hour shift, if he had the opportunity."

On this point, operators have taken the position that they would be willing to work the miners in 6-hour shifts, if, as in England, the miners were operated 24 hours a day. In the American mines the working days are much shorter.

MINE HAZARDS AND CONTINUITY OF EMPLOYMENT

Life insurance statistics were brought in by Mr. Bittner in an effort to show that the mining industry is the second most hazardous of all trades, powder-making being the first.

Mr. Bittner dwelt upon regularity and continuity of employment as constituting "one of the miner's rights." He presented figures tending to show the part played by strikes, car shortage, mine disability through accident and lack of market for coal, incident to seasonal demands as effecting the miner's work.

"The miner is the victim, rather than the cause, of the employment situation in the industry," said Mr. Bittner, "and labor is not respon-

sible for the failure of the mines to operate at full capacity. We must conclude that bituminous coal mining is a part-time industry."

LACK OF COAL CARS.

Lack of coal cars is the main cause for the laying off of work at the mines, declared Mr. Bittner. On this point the miners and operators are in agreement.

In continuing the presentation of the miners' figures on the second day of the hearing, Wednesday, January 28, Mr. Bittner went into the details of the "family" budget prepared by Prof. W. F. Ogburn of Columbia University. This budget was made up of the following items:

Food, \$768.60; additional food for man engaged in heavy work, \$32.78; clothing for man, wife, and three children, \$455.26; rent, \$216.00; fuel and light, \$70.00; miscellaneous, \$576.30. To this was added, in the special case of the miner, \$140 for explosives and blacksmithing, while a deduction of \$15.00 was made for savings on gardens. This made a yearly total of \$2,243.94, figured as a minimum for maintaining a family of five. This sum was not considered by Mr. Bittner to be "extravagant" for a miner.

PRODUCTION VALUE OF EMPLOYEES.

The production value of mine employees was next taken up. Mr. Bittner pointed out that in 1913 with 571,882 employees, coal worth \$565,234,000 was produced, or an average of \$990 worth per employee. In 1918, with 603,305 miners, coal worth \$1,491,000,000 was dug, or an average of \$2,420 per man. The value per ton in 1913 was \$1.18 and in 1918 it was \$2.57.

"Since 1909," said Mr. Bittner, "the tonnage has increased a little over 50 per cent, while the total value has increased 270 per cent."

If the wage rates had kept pace with the value of the product since the year 1916 as they had up to 1916, Mr. Bittner said, the miner would have received in 1918, \$1.41 per ton, or 61 per cent over the amount he did receive.

MINERS' WORK IN 1914.

Taking up the operators' claim that if the coal miners would work regularly they would make earnings adequate for present living conditions, he quoted from a pamphlet put out, he said, by the operators of Illinois and Indiana in 1914, in which it was stated that 175 days per year was the highest number the miner could get out of the industry in those States.

AS TO PROFITS.

Financial statements relative to the profits of various coal companies were then put into the record by Mr. Bittner in an attempt to show that the profits had been extravagant. With reference to the Pittsburgh Coal Company, the largest in the field, Mr. Bittner said that in 1914 its net income, available for dividends was \$1,371,059, or 2.01 per cent on a capital of \$64,000,000, while in 1917, its net income was \$14,076,852, or 20.06 per cent on its capitalization.

"This was equivalent to \$660 on each employee," said Mr. Bittner.

The Carnegie Coal Company made \$196,809 in 1913 and \$1,058,765 in 1917, according to statements referred to by the miners' representative.

FARRINGTON'S NEW DEMANDS.

After the various charts and exhibits had been filed with the commission, Mr. Farrington of Illinois, presented a statement of new demands asking for monthly wages for engineers of from \$275 to \$250, an increase in the number of engineers employed, two days off each month per man, and the retention of the engineers during the periods of suspension of mining. While admitting that this class of labor was already paid more in Illinois than in any other State, he said there was no class of labor in the mining industry where the same degree of intelligence was required or where the men worked under such a nervous strain.

Mr. Farrington also asked for the elimination of the differential between machine and hand yardage and deadwork, which is now in effect, stating that there was as much as fifty cents a yard difference, which he held was not warranted.

THE OPERATORS' DATA.

After Mr. Bittner's presentation of the miners' statistical data, Chairman Robinson asked Mr. Crews, for the operators, what was the position of the operators as to introducing their data. Mr. Crews replied that for several weeks a large staff of persons in Washington, not less than twenty-five, had been engaged in the compilation of data which the operators desired to introduce.

"The data, while it covers some minor fields," said Mr. Crews, "relates particularly to the actual earnings of miners, as disclosed by the actual payroll figures of a sufficient number of mines throughout the Central Competitive Field to portray fairly those facts which we regard as essential, and lying at the very base of the commission's inquiry."

"We believe that we can be ready with the work to proceed to the presentation of the data on Monday, February 2nd, and that the result of the adjournment for a few days will be to reduce the time that will be necessary to present the case in a concrete form."

SUMMING UP.

Chairman Robinson informed the miners and the operators that it was the belief of the commission that both sides would be as well served if the data submitted by the operators and the mine workers were left with the Commission without further discussion by one side of the figures presented by the other, thus avoiding confusion of figures and saving time as well.

Chairman Robinson made it clear, however, that each side would be allotted two or three hours for the final summing up of their respective arguments when the operators had concluded the presentation of their facts and figures from the basic mining records.

PENNA DENIES STEWART'S CHARGE.

Phil H. Penna, secretary of the Indiana Operators Association, was recognized by Chairman Robinson to make reply to charges by Mr. Stewart of the Indiana miners, that certain operators of Indiana had permitted the miners to load impurities in their coal without docking from the miners' wages, and had then sold the coal as pure. Mr. Penna said that he had made as thorough an investigation as possible on a trip to Indiana last week and that he was prepared to deny the charges in toto.

Mr. Penna submitted a number of affidavits from owners, superintendents, and room bosses of the mines in question denying that the men had been permitted to load impurities in the coal. In the case of one mine, named among those charged with the practice, Mr. Penna said that it had not been operated since the middle of 1918 due to the death of its owner.

NEED OF PERMISSIBLE EXPLOSIVES IN METAL MINES

It is reported that the fire in the Homestake Mine which occurred last September, and which resulted in the necessity of flooding the mine to extinguish, was caused by a single blast which ignited broken timber in an old filled stope that had been broken into by a new stope. The broken ore, waste, and timber had arched and hung up about 30 feet above the grizzly, and in blasting this down the fire started.

In the past there have been many such fires. Very serious ones have occurred in the deep Lake Superior mines. Manifestly the remedy is to use permissible explosives only, as they would be very unlikely to cause ignition.

The bureau has repeatedly advocated their use for this purpose. Because they were primarily planned for coal-mining explosives, metal miners have not fully appreciated their value in the prevention of fires in driving through old ground. While it is a little more troublesome to keep two kinds of explosives on hand, yet the resulting fires have been so serious, leading to loss of life in a number of cases, that it is a relatively small matter to take this important precaution.—U. S. Bureau of Mines, Reports of Investigations.

ALSATIAN POTASH SUPPLY NEEDED FOR DOMESTIC USE

In Alsace it is reported that on the first of July there were from 15,000 to 20,000 tons of potash salts, but that this was largely needed for domestic use. It has been estimated by Mr. H. S. Gale that there may be available during the next year—that is, up to the middle of 1920—50,000 tons of pure potash from Alsace and an equal quantity from Germany, which together would not be nearly enough to satisfy our pre-war requirements. It is reported that the accumulated stocks of Nebraska potash have all been sold.—Bureau of Mines' Minerals Investigations.

INDUSTRIAL RELATIONS AND WELFARE

HEARD AT THE HEARING

The Committee on Mines and Mining of the House began hearings on the War Minerals Relief situation, January 10. This is a continuation of the hearings which were held in October, 1919, and at which the Mining Congress presented the situation of the claimants to the committee.

On this groundwork of complaint of the present situation, the committee has gone into specific cases. The Chestatee Pyrites Company appeared through George L. Pratt, and Edgar Watkins, their former attorney. They were also ably represented before the commission by Schley Howard. Their evidence alone took up several days, and they were followed by E. A. Dickey for the Pacific Coast Chrome Producers Association.

The hearings have now continued for approximately three weeks, and many other claimants, representatives of various districts, are waiting to be heard.

The Mining Congress has mailed to war minerals claimants a copy of the brief it proposes to present to the committee, summarizing the situation and the needed relief. The attitude of the committee is essentially fair in that it wants to arrive at the true causes for the failure of the present law to give the relief that was originally intended.

The entire War Minerals Relief Commission has appeared at various times in the support of their contentions as to the proper administration of this law. Points at issue between the various claimants have led to spirited arguments on occasion. This is as interesting a committee session as is often held, and a principle as vital to the interests affected is being considered for settlement as often comes before a committee of Congress.

Mr. Alexander T. Vogelsang, First Assistant Secretary of the Interior, in an address before the National Rivers and Harbors Congress, in discussing the water-power legislation, said:

"Seventy per cent of the water power is west of the Mississippi and over 70 per cent of stationary prime-movers horse-power is east of that river. The east is rapidly consuming the expendable resources of power, and if she continues to sleep upon her water-power possibilities she may soon see the transfer of her great industries to the ever-alert west.

"About 55 per cent of the world's coal is in the United States. We must some day become great as an exporting nation. In the pre-war period we sold only 4,500,000 tons of our annual production of 700,000,000. England exported 77,000,000 tons, but she can no longer maintain this figure of exportation and is even now asking us for coal. We must also largely supply the South American market. It is easily imaginable that by clearing the water-ways to navigation, we will release for export millions of tons of coal from the

central fields and thus stabilize labor and general mining conditions, giving to the mine worker what he today craves most, more days of work per year."

Secretary Lane in a recent work, "The Strategy of Minerals," said:

"There is an international right to those things which are essential to life. We are to grow nationally by our generosity internationally."

Senator Norris, in discussing the Water Power Bill, said:

"When it comes to denying any special privilege to labor, to those who toil, we find Senators aplenty upon the floor of the Senate decrying against special privilege. When the anti-strike clause in the railroad bill was before the Senate, there was no dearth of Senators declaiming eloquently that labor must have no special privilege or rights; but where are they today, when here it is proposed to grant a special privilege to wealth?"

Senator Smoot, in discussing the Water Power Bill, said:

"I desire to call attention to the fact that when the question of the right of the Government to control and regulate the production of coal and other minerals developed in public lands was under consideration the statement was made by every official in the United States Government that the Government had no interest whatever in the control or management of those natural resources, other than to prevent waste and would charge only enough therefrom to pay the administrative cost. Now the theory is that the Government should charge all they possibly can, the result being the passing on to the consumer of whatever charges may be imposed over and above the actual cost of administration."

Senator Harding, in an address before the Ohio Society in New York City, said:

"There is a sane normalcy due under the new conditions, to be reached in deliberation and understanding. All men must understand and join in reaching it. Certain fundamentals are unchangeable and everlasting. Life without toil never was and never can be. There can be no excellence without great labor. Lowered cost of living and increased cost of production are an economic fraud. Capital makes possible while labor produces, and neither ever achieved without the other, and both of them together never wrought a success without genius and management. No one of them, through the power of great wealth, the force of knowledge, or the might of great numbers, is above the law, and no one of them shall dominate a free people.

"There can be no liberty without security and there can be no security without the supremacy of law."

Senator Underwood, in a discussion of the Cummins Railroad Bill, said:

"The Government is organized for the purpose of protecting the great mass of the people from the arbitrary act of any one class.

"When labor or the man at the bottom ceases to battle upward, your nation is dead. When you destroy the right of battle by which a man may fight his way to the top you have a dead nation, but when any one class gets so strong that they threaten the life of the nation, then your government must function or cease to exist as a government.

"Since the war began, the cost of running the railroads of America has been \$1,835,000,000 more than it was before the war started. Railroad labor has absorbed the entire \$1,835,000,000 of the increased cost in transportation.

"Now labor is asking another billion dollars. From whom? Capital? Capital can't pay it. They are asking it from the public. In the debate in the Senate on this bill it was asserted that when you increase freight rates \$1.00 you increase the cost to the consumer \$5.00. I do not believe this statement, but it certainly does increase the cost of commodities. The manufacturer, the jobber, the wholesaler, and the retailer, all add the freight cost to the cost of the raw material and then multiply their profit into it, so I think that it is safe to say that, for every dollar of increased freight rates, you put a charge of \$2.00 on the pocketbooks of the American people when they consume it. As I say, some people asserted it was five times as much, but I think that is exaggerated, though if it is twice as much the American public has paid in increased cost of labor on the railroads not \$1,835,000,000 but \$3,670,000,000, and if you put another billion dollars on that for labor that they are now demanding, that is two billion dollars more, so that the ultimate consumer would eventually pay five billion dollars since the war began as the price of increased labor on the railroads."

Otto H. Hahn, speaking before the Association of Credit Men, protested against the so-called "excess" profits tax and stated that this tax had been so complex in its result that reasonable assurance of its repeal or modification may be expected.

Among minor measures, Mr. Kahn suggested a small tax on checks, and a tax of 1 per cent on every single purchase exceeding \$2.00. Mr. Kahn believes that such a measure would be productive of vast revenue, the tax to be paid by the purchaser and not be included in the selling price but be specifically added as a separate item.

Mr. Kahn stated that it had been calculated that a tax of this nature would produce from two to four billions annually, according to whether imposed on all commodity transactions or only on retail sales to ultimate purchaser.

Mr. Kahn stated that we have had two years' test of taxation based principally upon taxing capital and business at rates without parallel anywhere. The result is writ large in high cost of living, industrial and economic dislocation and social discontent.

Mr. Samuel Gompers, in a letter to Senator Charles S. Thomas of Colorado, takes issue with the Senator in regard to his recent statements on the floor of the Senate concerning the control of food products. Mr. Gompers says:

"It may have been the law for centuries, but so far as the American workman is concerned he never received the benefits of the law and, therefore sought the enactment of the Clayton law, which merely provides that what one man may do lawfully should not be held unlawful when done by two or more men. What special privilege is contained in that principle?

"The Supreme Court read into the Anti-trust law the reasonableness of combinations of big business. No such interpretation was given in the activities of the people in their endeavor to secure relief from injustice and improvement in the conditions and standards of life and work.

"Is it not legitimate for the miners to seek sufficient wages to support themselves and their dependents? Have they not the right to ask for higher wages and to regulate the hours of employment, particularly when it is known and shown that the mine owners have profited far beyond the wildest suggestion of their profiteering careers. Should 400,000 mendicant and strive to live on a small pittance when the mine owners have complete freedom in making prices for the product turned out by the miners?"

Senator Thomas, in his reply to Mr. Gompers' letter, made the following statements:

"I am, of course, familiar with the statements of Secretaries Baker and Daniels, which, broadly speaking, are correct, but their failure to note many delays and interruptions in the course of production with which they were familiar condones without removing them. They know from experience that Mr. O'Connell's advice to 'strike' for dollars and to 'get into their minds the beautiful doctrine of more to 'place officers in position to go out and demand and then back them up' was literally and continuously observed by many wage-earners in many sections at the critical moment in the conflict.

"Intelligent men like yourself and Warren Stone know that increased wages chase increased cost of living but never overtake it, and that nothing but increasing production and thrift ever can, while strikes of national magnitude affecting basic industries immeasurably aggravate the end it is ostensibly designed to cure.

"Operators and employees seem unable to perceive that their interests and well-being are mutual; that class consciousness, which is but another name for class animosity, should not bar the way of a give-and-take agreement. All the arguments in the world cannot overcome my statement, that the strike, and for that matter all strikes of nation-wide character, involves a contention that the strikers must have their way regardless of consequences to the rest of the people.

"My statement that had your proposed amendment to the Lever bill been accepted it would not have affected the power and duty of the administration to overcome the coal emergency was no

advocacy either of 'breaking any law,' nor denouncing the miners for 'breaking a law not in existence.' I advocate the breaking of no law. Neither do I announce in advance of proposed legislation that I will disregard it if enacted. I believe with General Grant that the best way to be rid of a bad law is to enforce it.

"I have had many a hard struggle with adversity in my day, and I can say with truth that advancement has come by dint of hard work, earnest effort, observance of law, and respect for the right of others. What the world needs is tolerance, sympathy, cooperation, and mutual understanding. Each and all of us are linked and dependent upon each other. We must progress together if we progress at all."

Mr. Frank I. Cobb, editor of the *New York World*, in a recent address made some interesting statements concerning the hampering of the press. Among other things Mr. Cobb said:

"Confronted by the inexorable necessities of war, the Government conscripted public opinion as they conscripted men and money and materials.

"Having conscripted it, they dealt with it as they dealt with other raw recruits. They mobilized it. They put it in charge of drill sergeants. They goose-stepped it. They taught it to stand at attention and salute.

"The reason none of us can get at the basic truth is very simple. The coal operators meet in secret, and through their publicity agent they give out a statement of their side of the case. The leaders of the miners meet in secret, and they give out a statement of their side of the case. Either statement by itself is plausible and believable. The two of them, taken together, are wholly irreconcilable and simply add to the sum total of human ignorance.

"What the United States needs more than anything else today is the restoration of the free play of public opinion. That requires, first, the reestablishment of the freedom of discussion, for without freedom of discussion there is no public opinion that deserves the name."

In discussing the income taxes of the coal corporations, **Senator Thomas** said:

"The revenue laws of the United States provide that these returns shall not be disclosed to the public, but gives the President authority, under certain conditions, in his discretion, to disclose their contents.

"The Resolution S-247, now before the Senate, proposes to instruct a government official to disregard the law which he is sworn to support and to disclose to the Senate information which under that law he cannot disclose except as the President shall direct."

Senator Frelinghuysen, in discussing the income taxes of coal corporations, said:

"The committee intends to procure, from the operators themselves, from their books, the profits that they are making. The committee also intends to procure information regarding the wages that are now being paid. I have no sympathy with any coal operator who is making

an unfair profit, but I seriously object to the effort that is now being made to raise the miners' wages 14 per cent and give publicity to the fact that that 14 per cent will be taken out of the operators, when it will not. When that 14 per cent is to be imposed on the consumer, increasing the expense to the public service corporations in my state, \$500,000 in the cost of their coal and indirectly increasing the cost to the consumer, it is time to call a halt."

Senator Dial, during the discussion of the Americanization Bill, made the following statement:

"When the managers of one-twelfth of the taxable property of this country, one class of property that ought to be a prosperous class, admit that they cannot operate at a profit on the present basis, and when they admit that they cannot pay taxes, and when they fall down by the roadside and ask for help, does it not warn us that other enterprises will soon be in the same condition? If the railroads fall down, perhaps the next thing the factories will say that they cannot exist under the present high-priced labor, high taxes, high-priced materials, and everything of that sort. I would no more undertake today to induce my friends to start a new enterprise, on account of the uncertainties of taxation, and the great unrest in this country, and the turmoil that now exists, than I would undertake to jump out of the window of a seven-story building.

"We want to do something in this country to encourage investment, to encourage industry, and to encourage enterprise. We ought to do nothing to increase taxes in this country, but everything to encourage industry and more production."

Congressman MacGregor inserted in the Congressional Record some interesting facts concerning the war:

"The total costs of the war to all nations was about \$186,000,000,000.

"The expenditures of the United States were about \$22,000,000,000.

"During the first three months our expenditures were at the rate of \$2,000,000 per day, and during the next year they averaged more than \$22,000,000 per day, and for the final ten months the daily average was over \$44,000,000 per day.

"The number of men serving in the armed forces of the United States during the war was 4,800,000.

"In the battle of St. Mihiel, 550,000 Americans were engaged.

"The American losses of the war were 50,000 killed and 236,000 wounded.

"Five out of every six men sent to hospitals on account of wounds were cured and returned to duty."

Senator Phipps, in discussing the Americanization Bill, called attention to the fact that: "A captain in command of an infantry company informed me that three months before sailing his troop included men who spoke

fifteen different languages, that he was compelled to employ eight interpreters among them, and even with this assistance was unable to make his orders understood until these foreign-speaking people had acquired a small vocabulary of English."

He also stated that:

"In one coal-mining strike center there were twenty-seven foreign language newspapers, and in the steel strike district fifty-four foreign language newspapers were being circulated among our foreign-speaking aliens."

"If our country is to continue to progress at the highest possible rate of development, it can only do so through the unity of purpose of a homogeneous people. To attain this end Americans must speak the same language."

Senator Kenyon, in discussing the Americanization Bill, made the statement that:

"In the iron and steel industries of this country about 58 per cent of the employees are foreign born; in the meat-packing industry 61 per cent are foreign born; in coal mining 62 per cent; in the woolen-goods industry 62 per cent; in cotton goods 69 per cent; in clothing 72 per cent; in oil refining 67 per cent; in sugar refining 85 per cent. We have placed the very heart of American industry in the hands of men who are born in other lands, a small percentage of whom are naturalized and a large percentage of whom are illiterate, subject to insidious propaganda, which we are not organized to combat."

Senator Kenyon, in quoting from the *Director of the United States Bureau of Mines*, pointed out that:

"Had the percentage of accidents among the foreign born last year been reduced, as among the native born, 930 lives would have been saved, more than 700 serious accidents averted, and an economic loss of over \$4,000,000 in the mines alone would have been avoided."

"There are in this country five and a half million illiterates. There were 3,089,723 non-English speaking persons who could read and write some other language, making a total of illiterates and non-English speaking people of 8,592,074 out of our population."

"Out of the first million and a half of draftees in the Army, when a simple test was made as to whether they could read an order in English or write a letter home, there were 385,000 who could not do it. One out of every four of those boys could not read a common order in English or write a letter home."

"I think it is fundamental that the greatest enemy of democracy is ignorance, and our best work for democracy is to try to get rid of illiteracy and ignorance."

The Americanization Bill, which is now before Congress, carries an annual appropriation of \$12,500,000 for the education of illiterate aliens. The bill is being fought on the ground of expenditure and by the American Federation of Labor.

Senator Owen, in discussing the International Financial Conference, gave as the reasons why

the American dollar has lost its purchasing power, the following:

"First, due to a great world shortage of commodities arising from the destruction incident to the war, the stoppage of the processes of production and distribution of goods during the war, and the extraordinary demand from Europe for the products of this country; second, great gold imports in exchange for goods, about \$1,100,000,000; third, the expansion of credits in the United States."

Senator Chamberlain, in discussing the Water Power Bill, said:

"Less than 3 per cent of the coal of the United States is contained in the Pacific coast states, yet these states contain 44,000,000 horse-power, or 70 per cent of the total water-power resources of the nation, out of which only 2.8 per cent has been developed."

"The total land-surface area of the eleven public-domain states of the west is 755,915,560 acres, out of which 471,033,227 acres is in public ownership—that is, the public domain comprises 62 per cent of the total area of the United States."

"It is stated that enough hydroelectric energy is running to waste in the United States to equal the daily labor of 1,800,000,000 men."

"Our total coal exports in 1900 were a negligible quantity, but by 1913 they had jumped to 20,000,000 tons and last year they had climbed to 26,000,000 tons."

Senator Curtis, in calling attention to the work of the special session, said:

"In addition to the great supply bills, of which there were seven, the session found time to take up and dispose of the constitutional amendment providing for woman suffrage; the enforcing of national prohibition (this measure was vetoed by the President and was repassed over his veto); the day-light saving act was repealed and the act vetoed by the President and repassed over his veto. The bill to restore to the Interstate Commerce Commission its pre-war powers of rate-fixing was passed but was vetoed by the President; a measure was enacted amending and strengthening the Lever food and fuel control law; and an appropriation of \$750,000,000 was made for the Railroad Administration. A resolution was adopted to protect the dye industry; a bill was passed to regulate the entry of aliens into the United States; the Alaskan Railroad completion was provided for; a bill was passed providing for vocational rehabilitation and the return to civil employment of disabled persons discharged from military service in the United States. These were only a few of the larger measures which received attention in addition to the Sundry Civil Act."

Senator Lodge had inserted in the *Congressional Record* a letter from *Theodore Roosevelt* in regard to the sedition measure which is again before Congress. Among other things *Mr. Roosevelt* said:

"Free speech, exercised both individually and through a free press, is a necessity in any country

where the people are themselves free. Our government is the servant of the people, whereas in Germany it is the master of the people. This is because the American people are free and the German people are not free. The President is merely the most important among a large number of public servants. He should be supported or opposed exactly to the degree which is warranted by his good conduct or bad conduct, his efficiency or inefficiency, in rendering loyal, able, and disinterested service to the nation as a whole. Therefore it is absolutely necessary that there should be full liberty to tell the truth about his acts, and this means that it is exactly as necessary to blame him when he does wrong as to praise him when he does right. Any other attitude in an American citizen is both base and servile. To announce that there must be no criticism of the President, or that we are to stand by the President, right or wrong, is not only unpatriotic and servile, but is morally treasonable to the American public. Nothing but the truth should be spoken about him or anyone else. But it is even more important to tell the truth, pleasant or unpleasant, about him than about anyone else."

Coal Age, in its issue of January 25, carries an interesting article upon coal exports in 1919, by **Dr. Henry Mace Payne**, showing that during 1919 there were exported from this country 19,662,619 tons of bituminous coal in the following proportions:

	Per cent
Canada.....	59.9
Italy.....	9.4
Cuba.....	5.0
Brazil.....	3.6
Argentina.....	2.7
West Indies.....	1.4
Uruguay.....	1.0
Mexico.....	0.5
Chile.....	0.5
Panama.....	0.3
Other countries.....	15.7

Dr. Payne points out that in order to bring about the best possible conditions for the exportation of coal, the Coal Export Committee of the American Mining Congress, of which committee he is chairman, has developed a plan which anticipates providing the necessary machinery for both buyer and seller, in order that collective buying, as already in vogue, may be met by collective selling, and at the same time offer the widest latitude to the individual operator, wholesaler or exporter.

According to estimates prepared by the Bureau of Mines, the annual requirements which we may anticipate for foreign trade will be 31,000,000 tons, of which 9,000,000 tons will go to Europe. There is an available world market for 90,000,000 tons of American coal per year, if this amount can be mined and exported.

Dr. Payne insists that hearty cooperation by all concerned during the coming year will create a permanent market for recognized American coals at a fair price throughout the world,

and will do much toward satisfying the demands of labor.

The **Pittsburgh Leader** in its issue of January 6 in editorially discussing the miner's strike:

"One point is sure—the miners in their strike had the greatest opportunity to test out the strength of liberal opinion and become its leader in the United States, as a matter of principle. It is just as certain that the chance was thrown away—and not by the miners themselves. The opportunity may never come again. If it does it will scarcely be within the active days of the men who make up the forces of the organization today. The miners cannot be blamed for half-fearing they did not get all that was coming to them at any stage of the strike or settlement."

The **Commercial**, New York City, has the following essay regarding labor contracts:

"A contract is an agreement between two parties to do certain things. Its terms cannot be modified by one party without the consent of the other. If one party fails to keep its terms the other party may look to him for the resultant damages. That is the law in regard to contracts. It is well understood by intelligent persons everywhere. About the only ones who do not regard a contract as sacred are the members of labor unions—that is, some labor unions, for it may be said that a number of them do regard their given word as of some value.

"With the United Mine Workers, however, a contract is merely a scrap of paper. They secured their advance of fourteen per cent through force and in direct violation of their contract. With them it was a one-sided document. If the mine-owners had attempted to abrogate it they would have rushed into the courts to have prevented it and would undoubtedly have made use of the hated injunction to force its recognition. When the tables were turned on them they had much to say about 'government by injunction.'

"Now comes a plea by the operators of the coal mines for radical legislation to have the labor unions live up to their contracts. Experience has shown it to be very necessary. Most contracts are enforceable because of the responsibility of the parties. It is hoped that a plan may be devised by which the unions may be made responsible. It is possible, as was shown in the famous Danbury hatters' case, in which every individual member of the union at the time the agreement was entered into was made a defendant, and ultimately, judgment secured.

"If members of a labor union can be made to understand that each of them is individually responsible for the proper performance of a contract, they will not regard their end of the bargain quite so lightly as heretofore."

In the January 22 issue of **Coal Age** there appeared the following:

"Unhappy are the boasters. Most of us have sat under banquet orators and heard them tell how coal was the master, coal was the king, that

the United States could not do without fuel. We have cheered them to the echo, for we delight to be important. Now we know that our sorrows all are bound up with that importance. Like the hard-working drab old maid of the family we have been so egregiously important that we are now held to a sterner course of action than is demanded of our more frivolous sisters.

"In the past week a correspondent wrote **Coal Age** that the industry had gained by the strike, for everyone now recognized what coal meant to the nation. Alas! it is an irony of our importance that we are made to serve. The public relies on us. It cannot spend the time to inquire into other and less needful industries, to better and control them, to condemn and to berate them, but us it *must* find time to coerce.

"The railroads were tied to the plow because they were found useful and serviceable. Across their broad backs were laid the whips of regulation. Not because they watered their stocks were they punished and destroyed. Many luxury industries made larger profits and paid bigger dividends, and they escaped even investigation. But they were not important. If only the coal industry were the least necessary a malingering in the field of production, something we could do as well without, there would not be so many laws written for our admonishment, so many boards created for our control. May the public forget the importance of the public utilities and give them the freedom they accord so readily to other industries—that freedom that has made the non-essential industries expand so luxuriantly and develop so astoundingly."

Establishment of a definite government policy concerning the real relationship between public responsibility and business is a fundamental requisite in meeting demands of peace, **Senator Edge**, of New Jersey, told the *Rubber Association of America* at its annual dinner.

Citing the six and a half billion dollar deficit during government management of the country's railways, he declared the Government has shown "a total incapacity to conduct its own business," mainly because of the absence of what he described as a common sense budget system.

Establishment of such a system, with a budget commission of experts, accountants, actuaries and others free from politics and political influence, was recommended as a means of preventing duplication and waste and evading of responsibility of authority, he said. The Government's function is not to run business but to cooperate and help it, he asserted.

He advocated operation of the American merchant marine, comprising 1,300 ships, by private interests, "whose initiative, energy, business acumen and non-necessity of considering political expediency will, in reality, develop

the American merchant marine on which we build such high hopes."

Placing of an embargo on exports for the purpose of lowering prices of commodities at home would be inexpedient, he said. He declared this country could not exist, far less profit, by doing business exclusively with itself. The merchant marine, he intimated, would be useless should an embargo be placed on exportation of products of American factories and farms.

He said he was opposed to further extension of government credit, although he said he believed it is the Government's duty to prepare the vehicle with which America can do business abroad.

Use of Permissibles in Coal Mining

Progress is being made in introducing permissibles in the coal mines of the United States. For instance, in Alabama the production the past year was 19,500,000 tons, of which 33 per cent was machine mined and 67 per cent mined off the solid. In the production of this tonnage 4,000,000 pounds of permissibles were used, representing 71 per cent of the total of explosives required. The other 29 per cent was blasted down with 260,000 kegs of black powder. Alabama ranked fourth in the U. S. in the use of permissible powders.

The permissibles mainly used are of the ammonia nitrate class, of the stronger and more shattering grades. An effort is being made to induce the miners to substitute slower acting, lumping powders. New powders especially designed to produce lump coal are being introduced.

The new slow acting permissibles, designed to produce a heaving, spreading action, but as little shattering as possible, must be tamped with about the same care as black blasting powder. The miner is loath to realize this. He is accustomed to use dynamite with little or no tamping (even though he knows it is by no means the most efficient or economical practice). He insists on using the new permissible in the same way. The result is that the shot usually fails to break the burden and the powder is condemned as no good. As a matter of fact, it is only the method that is at fault.

The amount of permissibles needed per ton of coal produced depends on the efficiency of the miner, the kind of coal, thickness of seam, the suitability of the brand of powder selected. Under efficiency comes the proper drilling and locating of bore holes and tightly and fully tamping the charges.

Until the miner has become expert in the handling of permissibles, it is only fair that the operator should share with him losses due to increased slack; increase in cost of production etc. Employer and employee would both profit in the long run by such an arrangement; the operator by a higher percentage of lump coal and decreased assessments under the liability laws; the miner by greater safety effecting not only himself but those who work with him.

TRANSPORTATION

Under this heading THE MINING CONGRESS JOURNAL will hereafter carry a concise review of various orders, opinions and reports affecting freight rates throughout the country issued by the Interstate Commerce Commission and the Railroad Administration or any organization that may be made by law to succeed in any way to the functions of these two departments. The purpose is to get before our members the principal government mandates which affect our commodities, with a view to eliciting inquiries. It is not practicable to include much detail, but we are so equipped that we can give, upon inquiry, a full and complete analysis of any of the traffic problems which are brought to our attention. We hope that this chapter will be of interest and that you will advise us of your problems in order that we may give to each one the personal and complete attention which it cannot have in a review of this character.

Decisions of the Interstate Commerce Commission

Railway Mail Pay.—In an elaborate opinion the commission has approved the space-basis system to govern the transportation of the mails of the country by railroad, and has required extension to all mail routes. This decision is a distinct victory both for the Railroad Administration and the corporations themselves, because it will mean the payment by the Postmaster General of a large amount of money for the years 1917 and 1918, as well as the future. No accurate estimate of the amount can as yet be made, but an average of the guesses now being indulged in is approximately \$20,000,000. The carriers will get this for the year 1917 and the Administration will get it for 1918, but since 1917 is figured in the standard return it will boost the operating income for one of the years now being used, and consequently the corporations will figure in the increase twice. The Postmaster General alone will suffer.

Demurrage.—In a case brought by the American Smelting & Refining Company the commission has held that to permit complainant to obtain cars for plant use at charges less than those paid by others for detentions of similar duration would be unlawful. The complainant had used various cars of the carrier for its own plant purposes and protested payment of demurrage thereon.

Coal.—In a case brought by the Canton Chamber of Commerce the Commission found that rates via the lines of the Pennsylvania Company for the transportation of bituminous coal from the Pittsburgh and Connellsville districts in Pennsylvania subjected Canton, Ohio, to undue prejudice and disadvantage and unduly preferred Youngstown and Cleveland, Ohio.

In the case of Compton Coal Company, et al, the commission held that the rates on coal from Castle Gate, Helper, Price, and Sunnyside, Utah, to Boise, Nampa, and Caldwell, Idaho, had not been shown to have been unreasonable and that no damage had been incurred.

In the Diamond Alkali Company case the Commission found rates legally applicable on coal from Cowan, Pa., to Alkali, Ohio, to have been unreasonable prior to March 27, 1917, and waived the undercharges.

In the case of Bennett Grain Company the charges on coal, in carloads, from Benton and Zeigler, Ill., to points in South Dakota and Minnesota, reconsigned en route to other points in those states, were found to have been unreasonable to the extent that they exceeded the joint through rates plus a reconsignment charge, and reparation was awarded.

In the case of National Fireproofing Company the present intrastate rate of \$2.10 per ton on coal, in carloads, initiated by the Director General of Railroads, to apply from Nelsonville, Ohio, to Aultman, Ohio, was found to be unreasonable. A reasonable maximum rate of \$1.60 per ton has been prescribed.

In the case of Mississippi River & Bonne Terre Railway through rates charged on shipments of railway fuel coal and commercial coal from mines in Southern Illinois to destinations on the Mississippi river & Bonne Terre Railway in Missouri, composed of separately established proportional rates to and from East St. Louis, Ill., or Dupon, Ill., were found unreasonable, and reparation was awarded.

Petroleum.—In a case brought by the Pure Oil Company the commission found the rate applicable to the transportation of petroleum or its products, in carloads, from the midcontinent oil field of Kansas and Oklahoma to Minneapolis and Willmar, Minn., to be unreasonable and unduly prejudicial when applied to the transportation of crude, gas, and fuel oils, in carloads, to the extent that it exceeds 5 cents per 100 pounds less than the rate contemporaneously maintained from and to the same points on refined oil. In this same case the commission also held that the rate applicable to petroleum or its products from and to the same points is not unreasonable or unduly prejudicial when applied to the transportation of distillate, i. e., unfinished kerosene.

In the case of Kansas Oil Refining Company v. Director General et al, the rates on refined petroleum oil and gasoline, in carloads, from Coffeyville, Kans., to Garden City, Mo., were found to

have been unreasonable, and reparation was awarded. A rate not exceeding 19.5 cents per 100 pounds has been prescribed for the future.

In the Sunland Oil Company case a rate of 95 cents per 100 pounds on gasoline, in carloads, from Wilson, Okla., to El Paso, Texas, was found to have been unreasonable to the extent that it exceeded 44.5 cents, and reparation was awarded.

New Complaints

Docket No. 11113—Ohio Cities Gas Company, Columbus, Ohio, v. C. & O. et al.

Filed December 26, 1919, against the fourth class rate of 24 cents on *gas oil* from Cabin Creek Junction to Petersburg, Va., as unjust and unreasonable to the extent it exceeded 16.1 cents.

Asks for reparation.

Docket No. 11114—Acme Cement Plaster Company, St. Louis, v. Fort Worth and Denver City et al.

Filed December 26, 1919, against unjust and unreasonable rates on *solar oil* from Iowa Park, Texas, to Acme, Oklahoma.

Asks for fuel oil rates and reparation.

Docket No. 11119—International Paper Co., New York, v. Maine Central et al.

Filed December 29, 1919, against unjust and unreasonable rates on *fuel oil* from Portland, Me., to Livermore Falls and Rumford.

Asks for reasonable rates and reparation.

Docket No. 11122—Seaboard By-Product Coke Co., Newark, N. J., v. Monongahela Ry. Co. et al.

Filed December 27, 1919 against unjust and unreasonable charges on *coal* from P. and L. E. mines via Sharon, Pa., and Erie to Seaboard, N. J., by reason of failure to follow routing and time instructions.

Asks for reparation.

Docket No. 11124—Perry County Coal Corporation et al, v. Illinois Central et al.

Filed December 31, 1919, against unjust and unreasonable charges on *coal* from complainants' mines in Belleville group to points on the Illinois Southern in Illinois and Missouri and points in Missouri on the Mississippi and Bonne Terre in Missouri, because there are no joint rates.

Asks for joint rates, not in excess of those from mines on the Illinois Central in the Belleville Group.

Docket No. 11127—Poehlmann Bros. Co. et al, v. Indiana Harbor Belt et al.

Filed December 30, 1919, against unjust and unreasonable rates on *anthracite coal* to Illinois destinations by reason of increases applied to both factors in the combination.

Asks for joint through rates, a general reconstruction of the switching district of Chicago to include Morton Grove, Rogers Park, Elmhurst, Hinsdale, Western Springs and LaGrange and a general readjustment in the outer zone based on geographical considerations and reparation.

Docket No. 11133—Soper Coal Co. et al, Cutler, Illinois, v. Wabash et al.

Filed December 31, 1919 against unjust, unreasonable and unjustly discriminatory rates on *coal* from mines at Cutler, Illinois.

Asks for the Belleville group rates.

Docket No. 11134—Jones & Laughlin Steel Co., Pittsburgh, v. Aliquippa & Southern et al.

Filed January 3, against unjust and unreasonable rates on *iron ore, coal and other raw products* inbound and manufactured *iron and steel articles* from and to Woodlawn, Pa., by reason of the failure of trunk lines to absorb terminal charges of the principal defendant.

Asks for reasonable rates and reparation amounting to \$200,000.

Docket No. 11142—Cannon Manufacturing Co., Kannapolis, N. C., v. Southern et al.

Filed January 9, 1920, against unjust and unreasonable combination rates on *coal* from Stanley Junction and Morning Glory, Tenn., to Kannapolis and Concord, N. C., as unjust and unreasonable because in excess of the joint through rates from the points of origin to other North Carolina points with which Kannapolis and Concord are usually grouped.

Asks for reasonable rates and reparation.

Docket No. 11143—Seaboard By-product Coke Co., Seaboard, N. J., v. Philadelphia & Reading et al.

Filed January 16, against unjust and unreasonable rates on *coal* from mines on the Pittsburgh & Lake Erie to Seaboard.

Asks for reasonable rates and reparation.

Docket No. 11144—Gulf Refining Company of Louisiana v. Texarkana & Fort Smith et al.

Filed January 10, complaints of unjust and unreasonable rate on *gasoline* and *lubricating oil* between Port Arthur, Tex., and Memphis, Tenn.

Asks reparation.

Docket No. 11149—Fifth and Ninth Districts Coal Bureau v. A. T. & S. F. et al.

Filed January 12, against unjust and unreasonable rates on *coal* from mines in the Fifth and Ninth districts of Illinois to destinations in states of Illinois, Indiana, Michigan, Wisconsin, Minnesota, North Dakota, South Dakota, Nebraska, Missouri and Kansas.

Asks for just and reasonable rates.

Docket No. 11151—Standard Asphalt & Refining Company, Inc., v. Texas Pacific et al.

Filed January 13, against unjust and unreasonable rates on *crude oil* from New Orleans and Plaquemine, La., to Independence, Kansas.

Asks for just and reasonable rates and reparation.

Docket No. 11152—Hord Alkali Products Company et al, v. C. B. & Q. et al.

Filed January 13, against unjust and unreasonable rates on *steam coal* between points in Wyoming and Lakeside, Hoffland and Antioch, Nebraska.

Asks just and reasonable rates and reparation.

Docket No. 11154—Sligo Iron Store Co., St. Louis, v. Western Maryland et al.

Filed January 15, 1920, against unjust and unreasonable rates on fine *smithing coal* from Coketon, W. Va., to Lamar, Colo., due to alleged misrouting, and the addition of fractions to the rates.

Asks for reparation.

Docket No. 11155—Shaffer Oil and Refining Co., Chicago, v. A. T. & S. F., et al.

Filed January 16, 1920, against a rate of 26 cents on *crude petroleum* from Gahagen and Shaffer's Spur, La., to Pershing, Okla., as unjust and unreasonable.

Asks for reasonable rates and reparation.

Docket No. 11156—Central Pennsylvania Lumber Co., Williamsport, Pa., v. B. & O. et al.

Filed January 17, 1920, against a rate of \$3.25 on *coal* from Lucinda, Pa., to Ricketts, Pa., via an interstate route, as unjust and unreasonable because in excess of a rate of \$2.35 to a more distant point.

Asks for a reasonable rate and reparation.

Docket No. 11159—Choate Oil Corporation, Oklahoma City, v. C. R. I. & P. et al.

Filed January 19, 1920, against unjust, unreasonable and unjustly discriminatory rates on *crude petroleum* from points in the Burkburnett district to Oklahoma City in favor of Cushing, Okmulgee, Sapulpa, Tulsa, Kansas City, Sugar Creek, Fort Worth and Shreveport.

Asks for a rate not exceeding 18.5 cents from prior to October 14, 1919, and reparation amounting to \$14,000.

Docket No. 11169—National Fireproofing Co., Pittsburgh, v. Pennsylvania Co. et al.

Filed January 22, against unjust, unreasonable, unjustly discriminatory rates on *coal* from Branchton, Queen's Junction, Leesburg and Redmond, Pa., to Perth Amboy, Natco and Port Murray, N. J.

Asks for reasonable joint rates and reparation.

Sub. No. 1.—Same as foregoing as to shipments from County Home, Woodville Junction, Carnegie and Rook, Pa., to Lorillard, Perth Amboy and Port Murray, N. J. Same prayer.

Tentative Reports

Docket No. 10552—The Pittsburgh & West Virginia Ry. Co., et al, v. P. & L. E. R. R. Co., et al.

A tentative report in this case has been proposed by Attorney-Examiner R. E. Quirk, the syllabus of which is as follows:

"Divisions accorded complainants on bituminous coal, in carloads, from stations on their lines to various destinations on defendants' lines found unreasonable and inadequate, but not unduly prejudicial. Reparation awarded."

Docket No. 10704—Tide Water Oil Co. v. Director General et al.

A tentative report in this case has been pro-

posed by Attorney-Examiner M. A. Pattison, the syllabus of which is as follows:

"The practice of the Central R. R. Co. of New Jersey and its connections in absorbing the charges of the East Jersey R. R. & Terminal Co. at Bayonne, N. J., on traffic to and from certain independent industries served by the latter while refusing to absorb the charges on traffic of complainant, other than lighterage freight, not found to be unjustly discriminatory or unduly prejudicial, as alleged. Complaint dismissed."

Docket No. 10174 (and Subs 1 to 4, inclusive)

—National Tube Co. et al, v. P. C. C. & St. L. R. R. Co. et al.

A tentative report in this case has been proposed by Examiner G. H. Mattingly, the syllabus of which is as follows:

"1. The Benwood & Wheeling Connecting Ry. and the Mercer Valley R. R. found to be plant facilities and not common carriers and the demurrage tariffs of those roads filed with this Commission found to be of no force and effect.

"2. The trunk line demurrage tariffs applicable to the detention of cars by industries served by the industrial lines named above not shown to result in unreasonable or unduly prejudicial charges.

"3. The McKeesport Connecting Railroad found to be a common carrier and rules for car interchange between it and its trunk line connections and basis for settlement of accrued charges suggested."

Docket No. 10791—Boehmer Coal Company, Inc., et al, v. P. C. C. & St. L. R. R. Co. et al.

A tentative report in this case has been prepared by Examiner E. H. Waters, the syllabus of which is as follows:

"Rates for the transportation of coal in carloads from points in Illinois to East St. Louis, Ill., and St. Louis, Mo., not found unreasonable or otherwise unlawful. Complaint dismissed."

Docket No. 10885—Indian Refining Co., Inc., v. B. & O. R. R. Co. et al.

A tentative report in this case has been proposed by Examiner T. M. Woodward, the syllabus of which is as follows:

"Rate on petroleum gas oil from Lawrenceville, Ill., to Petersburg, Tenn., by route specified held unreasonable, unjustly discriminatory and unduly preferential. Reparation awarded. Fourth Section Applications denied."

Docket No. 10768—Empire Refineries, Inc., v. Director General et al.

A tentative report in this case has been proposed by Examiner Harris Fleming, the syllabus of which is as follows:

"Charges collected on a carload of gasoline shipped from Cushing, Okla., to Gastonia, N. C., and rebilled from that point to Syracuse, N. Y., not shown to have been unreasonable. Complaint dismissed."

Docket No. 10814 (and related cases)—Seaboard by-product Coke Company v. Director General et al.

A tentative report in this case has been proposed by Attorney-Examiner C. F. Gerry, the syllabus of which is as follows:

"Rates on by-product coke, in carloads, from Seaboard, N. J., to Syracuse, N. Y., to certain deliveries in Brooklyn, N. Y., and by way of New York harbor to Port Chester, N. Y., and Bridgeport, Higganum, and Midway, Conn., not found to have been unreasonable. Carload rates on the same commodity from Seaboard and Wharton, N. J., to certain points in New York and Pennsylvania found to have been unreasonable. Reparation awarded."

Docket No. 10594—Wholesale Coal Trade Association of New York, Inc., et al, v. Director General et al; and

Docket No. 10684—Lehigh Valley Coal Sales Co. v. Director General et al.

A tentative report in this proceeding has been proposed by Examiner W. N. Brown, the syllabus of which is as follows:

"Upon complaints alleging that the demurrage charges and rules in effect since November 11, 1918, on coal held at Baltimore, Md., Philadelphia, Pa., and at certain points in the vicinity of New York, N. Y., for transshipment by water beyond were and are unreasonable, unjustly discriminatory and unduly prejudicial; *Held*, that

"1. The free time of three days under the average agreement between December 1, 1918, and March 31, 1919, inclusive, was unreasonable, and that five days' free time would have been reasonable during that period, and that the present free time of five days is not unreasonable.

"2. The charge of \$3 per car per day for excess detention between December 1, 1918, and March 2, 1919, inclusive, was unreasonable to the extent that it exceeded \$2, and that the present charge of \$2 is not unreasonable.

"3. The monthly period for adjusting credits and debits under the average agreement is not shown to have been or to be unreasonable.

"4. The demurrage rules and regulations maintained at the Lake Erie transshipping ports are unduly prejudicial as compared with those maintained at the tidewater transshipping ports.

"5. The record does not justify any general relief with respect to demurrage charges which accrued during a strike of tugmen and bargemen in New York harbor.

"Reparation awarded or collection of undercharges waived to the basis above found reasonable."

Docket No. 10936—The Atlantic Refining Company v. Director General et al.

A tentative report in this case has been proposed by Attorney-Examiner R. E. Quirk, the syllabus of which is as follows:

"Rates exacted by defendants for transporting bituminous coal, in carloads, between yards of complainant situated in Philadelphia, 1.6 miles apart not shown to have been or to be unreasonable. Complaint dismissed."

Petitions for Rehearing

Docket No. 10367 and Sub. No. 1—W. A. Gosline & Company v. Director General et al. In this

complainant routed coal from Pennsylvania mines to Toledo over a route where no through rate was in effect, and as a consequence each factor of the combination was increased by the amount authorized in General Order No. 28. The commission ordered the payment of reparation and found that rates on coal made by increasing each factor of a combination were unreasonable. Mr. Fletcher and his associates, attorneys for the Railroad Administration, have filed a petition for rehearing in the case and contend that the rate applied was a through rate and not a combination; that the Freight Rate Authority requiring the addition of the maximum allowed under General Order No. 28 to the sum of the through rates used in a combination and not to the factors thereof was not a concession of the unreasonableness of the latter course, and that the carriers were obliged to send the shipments over the routes assigned and apply the rates in effect thereon. Something over thirty different reasons are assigned for a reopening of this case.

Docket No. 10363—Solvay Process Company v. D. L. & W. R. R. Co. et al. In this case the commission found to have been and to be unreasonable rates charged for shipments of limestone, in carloads, from Jamesville, N. Y., to Solvay, N. Y., and awarded reparation. It will be recalled as the case in which the Department of Commerce intervened and submitted an elaborate brief. The Railroad Administration subsequently filed a petition for rehearing, and among numerous objections to the commission's finding stated that the award of reparation was not justified except upon the most narrow and technical interpretation of the law, and that if the principle of the decision were generally applied all sorts of discriminations would result. The Railroad Administration also expressed the belief that shippers of all low-grade commodities moving for a short distance would flood the commission with complaints based upon this decision and that the amount of reparation which the Railroad Administration would be called upon to pay would be enormous. The commission has given due consideration to this petition for rehearing and denied it by an order entered January 12.

Released Rates

Released Rates Order No. 86—Ore and Concentrates from Alaskan Points to Seattle and Tacoma, Wash. This order, entered November 10, is responsive to 20th Section Application No. 88, filed by The Copper River & Northwestern Railway Company. It authorizes the establishment, upon not less than thirty days' notice, of rates on ore and concentrates in sacks, dependent upon the value of the property transported. These rates are to be maintained until otherwise ordered by the commission.

Released Rates Order No. 92—Ore in Carloads from Lake Valley, New Mexico, to Douglas, Ariz. This order, entered January 2, is responsive to 20th Section Application No. 141, filed by the A. T. & S. Fe R. R. It authorizes the establishment, upon not less than one day's notice, of rates on ore, in carloads, minimum

weight 60,000 pounds, but not to exceed full space or weight loading capacity of car, from Lake Valley, N. M., to Douglas, Ariz., shipped in interstate commerce, dependent upon values declared in writing by the shipper. These rates are to be maintained until otherwise ordered by the commission.

Released Rates Order No. 93—Ore in Carloads, from Mullan and Hunter, Idaho, to Bradley, Idaho. This order, entered January 2, is responsive to 20th Section Application No. 139, filed by the Northern Pacific Railway. It authorizes the establishment, upon not less than one day's notice, of a rate of \$1 per ton of 2,000 pounds, minimum weight 60,000 pounds, from Mullan and Hunter, Idaho, to Bradley, Idaho, on ore, shipped in interstate commerce, dependent upon value not exceeding \$100 per ton and so declared in writing by the shipper or agreed upon in writing as the released value of the property. This rate is to be maintained until otherwise ordered by the commission.

Released Rates Order No. 95—Ore, Refuse Manganese, in Carloads, from Batesville, Ark., to Rusk and North Rusk, Tex. This order, entered January 2, is responsive to 20th Section Application No. 140, filed by Agents Leland and Morris for and on behalf of all carriers parties to Leland's I. C. C. No. 1212 and Morris' I.C.C. No. 678. It authorized the establishment, upon not less than ten days' notice, of a rate of \$2.20 per ton of 2,000 pounds, minimum weight 100,000 pounds except where weight carrying capacity of car is less, in which case weight carrying capacity of car will govern as minimum weight, from Batesville, Ark., to Rusk and North Rusk, Tex., on ore, refuse manganese, in carloads, shipped in interstate commerce, dependent upon the value declared in writing by the shipper, or agreed upon in writing as the released value of the property, not exceeding \$10 per ton of 2,000 pounds. This rate is to be maintained until otherwise ordered by the commission.

Railroad Administration

Earnings.—The Director General has announced the operating results for the month of November, which cover practically all roads under Federal control. The net operating income for November was \$22,000,000, which represents a loss of \$53,000,000 to the Government after allowing one-twelfth of the annual rental. This month was of course abnormal, owing to the coal strike, and the results have not been surprising. In his statement the Director General reviews the operating results during the two years of Federal control, and eliminates 1918 because it was a war year and because the increases in rates were effective only during six months, while the increased wages to a great extent were effective during the whole year. The first six months of 1919 are considered abnormal because of the slump in freight business following the armistice, and the last two months were so affected by the coal strike as to be of no value for comparative purposes. This leaves the four months, July to October, as representative of approxi-

mately normal operating conditions. The profit to the Government during those four months was \$45,200,000, and the deficit for the twenty-three months ended with November is \$527,200,000. The Director General concludes with the statement that if the advanced rates had been in effect from the beginning of Federal control there would have been a surplus at the end of October, 1919, of about \$14,000,000 instead of the deficit referred to above.

Traffic.—The Director General has given out a statement that indications are that the demand for transportation during January and February will be extraordinarily heavy. The figures available for the early part of January indicate a large increase and there is a promise of an even greater increase as the winter progresses. Mr. Hines concludes with an assurance that the Railroad Administration will make every effort to meet this extraordinary demand during the balance of Federal control and hopes for the continued cooperation of the shipping public.

Coal Mine Ratings.—The Car Service Section of the railroad Administration has issued a revised circular outlining rules for rating for car distribution purposes coal mines loading coal at mine tipples. The principal changes are:

1. The number of idle hours at the mine are to be used in computing car supply will be figured on a basis similar to the one used in the operators' reports to the Geological Survey.
2. Where the carrier does not send at least 25 per cent of the cars rated or ordered on to the tipple before 7 a. m. those cars so furnished will not be counted in that day's supply unless they are loaded.
3. In order to prevent the use of cars for storage purposes the rating will be decreased by the number of cars held unbilled for more than one day.

Handicapped by Lack of Coal

One of the greatest coal, iron and steel companies in German-Austria finds itself in a serious situation in regard to an adequate fuel supply, as most of the mines which furnished the coal or coke consumed by the furnaces are situated in the new Czech territory, and the Czechs have practically ceased supplying the Austrian iron-works. As the Germans are not in a position to assist the company out of its difficulty it has been proposed to resort to electric smelting as a solution. In normal times the company operates twelve furnaces and produces about 600,000 tons of pig iron yearly. At the present time but one blast furnace is running.

One other European country that is confronted with the fuel problem is Italy, and it is also resorting to electric iron-ore reduction as a possible key to successful economical operation. Considerable interest attaches to a new venture of the Ansaldo Company at Cogne, in north-western Italy, with a 20-ton electric furnace installation. Germany will be a strong competitor for Italian markets, although the Ansaldo Company has a deposit of iron ore of a good grade and abundant alpine water power available for electric power generation.—Bureau of Mines.

PATENTS

CONDUCTED BY JOHN BOYLE, JR.

1,324,139—Wm. L. Ziegler, Sunset, Idaho. **Flotation Apparatus and Process.** The object is to secure by agitation, a thorough homogenizing of the frothed ore pulp. Air is injected into the upwardly moving column of pulp to produce a body of froth at the top of said column; the froth is beaten in a confined space to break up the larger air bubbles and produce a creamy froth while permitting the excess of air to escape.

1,324,149—John E. Greenawalt, New York, N. Y. **Magnetic Separator.** The magnetic particles are held to the depositing or concentrating surface of an endless belt by means of a powerful magnetic field acting through the belt, the belt traveling in a given direction and carrying the magnetic particles to a point beyond the magnetic field, where they are dropped, the non-magnetic particles and water of the original pulp being carried in the opposite direction. The belt is also subjected to a transverse reciprocating shaking movement to effect the release of the non-magnetic particles.

1,324,250—Chas. G. Hebbard, Joplin, Mo. **Concentrating Table** of the type in which there is specific means for securing a lateral movement simultaneously with the longitudinal movement, and also an improved mounting of the resilient supports.

1,324,301—Robert E. Carmichael, Damon, Texas, assignor of one-half to George Hamman, Houston, Tex. **Apparatus for Sulphur Mining** in which a heated fluid is pumped into contact with the sulphur strata and the fused sulphur thereafter pumped to the ground. Means for discharging mud into the bottom of the well for the purpose of cutting off inflowing currents of salt water and thus keeping the sulphur in a molten condition until it is pumped to the surface.

1,324,352—Wm. A. Hussey, Oakland, Cal., assigned to Jas. H. Alling and Francis M. Wright, of San Francisco, Cal. **Electrolytic Cyaniding Process,** consisting in subjecting a compound solution of a cyanid and a haloid salt to electrolysis, forming a cyanogen haloid salt around the anode and sodium amalgam at the mercury cathode, subjecting the finely pulverized gold and silver ore to the products of electrolysis for more thorough dissolution of the gold and silver, then interrupting the passage of the current there-through to decompose the sodium amalgam formed at the cathode, then intermingling anode and cathode products of decomposition to regenerate the original solution applied, then adding a zinc salt to break up the copper present in the electrolyte and finally electrodepositing or precipitating gold and silver dissolved in the electrolyte with soluble anodes of zinc.

1,324,451—John Hoffer, Mariana, Pa. **Safety Device for Elevator Cars and Mine Cages.**

1,324,491—Ross M. Bickley, Pittsburgh, Pa., assigned to Heyl & Patterson, Inc., Pittsburgh, Pa. **Apparatus for Handling Coal,** consisting of a screening device, a rotary picking table, means for discharging one grade of coal on one table and another grade upon another table, means for discharging the slack, a mixing chute and means for directing the coal from said tables and the finest coal into said chute simultaneously.

1,324,529—George Ullrich, Magdelburg, Germany, assigned to The Chemical Foundation. **Magnetic Drum Separator** provided with means for varying the intensity of the field whereby a premature discharge of the magnetically weak or coarse but magnetically strong material is prevented when such material is introduced between non-magnetic material.

1,324,791—Samuel L. Boggs, Ivanhoe, Va. **Flotation Apparatus** in which there is a new arrangement of feed, discharge and paddles.

1,324,921—Wm. Mosso, Neffs, Ohio. **Miner's Lamp** provided with two separate carbide containers.

1,325,028, 1,325,029, 1,325,030—Edmund G. Morgan, Chicago, Ill. **Cutter Chains for Mining Machines.**

1,325,031—Edmund G. Morgan, Chicago, Ill. **Mining Machine** for cutting out crescent shaped sections from the mine wall, breaking them into smaller sections and removing them by a flight conveyor for loading. Removes the fine particles of material produced during the cutting operation.

1,325,263—J. C. Patterson, Philadelphia, Pa. **Placer Mining.** Separates the water area of the stream and the value bearing loose material, for an extended distance, into a plurality of longitudinal channels, thinly divided from one another by means extending down through said loose material; successively closing the upstream extremities of the channels so formed while permitting the water to flow through an open channel, and successively removing the value bearing material from each closed channel.

1,325,293—Levi S. Hoon, Butler, Pa., one-half assigned to G. C. Bellis, Butler, Pa. **Method of Cleaning Oil Wells.** Removes the incrustation of wax by pouring a solution of water and caustic soda into the well, together with carbid for simultaneously heating and agitating the solution in the well.

1,325,554—Wendell L. Carlson and Earl C. Hanson, Washington, D. C. **Means for Locating Ore Bodies by Audio Frequency Currents.** An exploring coil is connected in a balanced electrical circuit energized by a source of audio-frequency current, which circuit will be immediately thrown out of balance when the exploring coil is brought into the vicinity of ore bodies and thus manifest the presence of the ore by actuating a suitable responsive device.

1,325,609—Adolph G. Bauer, Whitwater, Colo. **Mining Car.** A particular construction of car with hinged sides and removable end, a portion of which car is adapted to be placed in a tunnel previous to a blast, in such a manner that it will cover the bottom of the tunnel and the muck will fall into the cars when the blast is shot.

1,325,610—Adolph G. Bauer, Ouray, Colo. **Mining System.** A series of receptacles having hinged sides and ends are laid in the tunnel to receive the blasted material. This is compacted by raising the sides so as to act on the load transversely and then by raising the inner end so as to act on the load longitudinally.

1,325,817—Geo. D. VanArsdale and Chas. G. Maier, New York, N. Y. **Flotation Process** which comprises adding to a pulp of water and ground ore, an emulsifying agent, causing true emulsification of the agent so added, then demulsifying the agent and separating by flotation.

1,326,125—Rosa Wallner, Bisbee, Ariz. **Roasting Ores.** The ore is introduced into a rotating retort commingled with a combustible material, and while heating the retort externally fresh air is forced in opposite directions through the headed and ignited mass.

1,326,174—Walter O. Borchardt, Austinville, Va., assigned to New Jersey Zinc Co. **Flotation Apparatus** in which there is a layer of metallic spherules supported by the porous diaphragm in the bottom of the cell and through which the air enters the flotation cell.

1,326,255.—Alfred B. Day, Oliver Springs Tenn. **Mining Car Wheel.**

1,326,327—Robson Dunning, Schenectady, N. Y. **Oil Drill** in which the cutters may be removed from and replaced in the drill head without removing the drill head from the bore of the well.

1,326,338—Ralph Gregory, Kansas City, Mo., Assigned to Oil Well Reclamation Co., Chicago, Ill. **Oil Well Pump.** A particular construction of air lift pump which is self contained or independent of the casing of the well.

1,326,453—Archie H. Jones, Tonopah, Nev. **Flotation Apparatus** in which agitation is effected by both mechanical and pneumatic means.

1,326,463—John J. Nelson, Los Angeles, Cal. **Leaching Copper Ores** with sodium bisulfate and common salt, and precipitating copper from the filtered solution with iron in the presence of common salt.

1,326,506—Granville A. Humason, Shreveport, La. **Drill Bit** for deep well drilling in which the bit may be securely attached to the drill stem, so that there will be no liability of the bit becoming loosened when the drill stem is rotated backwardly or on account of the threads wearing.

1,326,509—Granville A. Humason, Houston, Tex. **Rotary Boring Drill** of the under reamer type.

1,326,855—Edwin Edser, Brockley, London; and Henry L. Sulman, London, England. **Ore Flotation Process** in which the ores are subjected either before or during the flotation to the action of a silicic acid solution.

Spain as a Copper Producer

Spain is the oldest and steadiest producer of copper in the world, with developed reserves sufficient to insure production from forty to sixty years. Spain's most famous producing mine is the Rio Tinto in the Province of Huelva, an enormous deposit worked by open pits, resembling in many respects America's so called "porphyry" deposits. Extensive British, French and Spanish interests control the output, and most of the Spanish copper is refined in England. Spain and Portugal together produce about 2.9 per cent of the world's output or around 43,000 metric tons of copper annually. In 1917 there were 1,901,341 metric tons of copper ore mined. The Rio Tinto Co., the Tharsis Companies and the Cordova Copper Co. are the chief producers. The Portuguese deposits are extensions of the Rio Tinto field. In 1918 Portugal furnished about one-fifth of the total production from the peninsula.

The development of Russia's copper resources is burdened at the present time by many difficulties, chiefly political, whose elimination will lead to a marked increase in the supply of copper from that country.—U. S. Bureau of Mines, Reports of Investigations.

SULPHUR COMPANIES

GO AFTER ACID BUSINESS

The sulphur companies are making a strong bid for the acid business, and are now quoting prices as low as \$14 to \$15 a ton f. o. b. mines. The Texas Gulf Sulphur Company started production in April at the rate of about 1,000 long tons per day, which has been increased to 1,500 tons or more. The total production of the three large sulphur companies will probably exceed 4,500 long tons per day.—U. S. Bureau of Mines, Reports of Investigations.

INDUSTRIAL NOTES

The Cornelia Copper Company at Ajo, Ariz., has recently finished and placed in operation an electrolytic plant for the treating of their ores. This plant is said to be the largest and most complete of its kind in the world and is attracting considerable attention in the mining fraternity.

Plans have been perfected for the erection of a \$3,000,000 plant to concentrate low grade magnetic iron ores on the eastern Mesaba range.

A large number of Duluth mining men are interested and the company has the backing of well-known financiers.

The Ingersoll-Rand Company have developed and are offering for sale, a new member of their well-known "Jackhammer" group of hand hammer drills. This machine, known as the Bar-33 "Jackhammer," is smaller and lighter than other Ingersoll-Rand machines of a similar construction. It fulfills a long-existing need for a light, self-rotating hammer drill.

Its weight of 21½ pounds should be a very welcome feature, as it permits the use of a drill in locations and positions not accessible to heavier machines.

The manufacturer recommends this light drill for bench work in soft limestone quarries; for trimming in metal and coal mines, and for pop-hole work in quarries and open pit mines. In addition to the above the machine may be conveniently used for drilling holes in concrete and masonry foundations. This type of "Jackhammer" is not recommended for drilling deep holes or for use in hard rock, but for drilling where a machine of extremely light weight is necessary.

The Bar-33 is the fourth type of "Jackhammer" manufactured by the Ingersoll-Rand Company. Machines of this type are now available varying in weights: 21½-35-41, and 70 pounds.

The Thomas Devlin Manufacturing Company, Philadelphia, manufacturers of malleable soft grey iron, brass and steel castings, has issued the following interesting circulars dealing with costs:

Advance of labor cost of 17 per cent since Circular No. 29 was issued, and the average now is 189 per cent over labor cost of 1909. The wages of five important tradesmen who produce hardware in our works are as follows:

Day Moulders—advance 171 per cent.

Piece Moulders—advance 212½ per cent.

Machinists—advance 143⅓ per cent.

Tool Makers—advance 171 per cent.

The method employed to arrive at the above percentage is as follows:

Laborers—advance 246⅔ per cent.

1909—Moulders received \$18 per week—60 hours at 30c per hour. No difference then in favor of piece moulders.)

1920—Moulders (day) \$39 per week—48 hours at 81¼c per hour, or 171 per cent advance since 1909.

Moulders (piece) \$45 per week—48 hours at 93¾c per hour, or 212½ per cent advance

since 1909, and the per cent is even greater than appears by extra help furnished on demand of the moulders.

1909—Machinists \$18 per week—60 hours at 30c per hour.

1920—Machinists \$35 per week—48 hours at 73c per hour, or 141⅓ per cent advance since 1909.

1909—Tool makers \$18 per week—60 hours at 30c per hour.

1920—Tool makers \$39 per week—48 hours at 81¼c per hour, or 171 per cent advance since 1909.

1909—Laborer's average, \$9 per week—60 hours at 15c per hour.

1920—Laborer's average, \$25 per week—48 hours at 52c per hour, or 246⅔ per cent advance since 1909.

In addition to the increased percentages of labor entering into the cost of hardware, there has been an advance of over 150 per cent in raw materials, iron, coke and coal and they are still going up. War taxes levied by the National Government, capital stock taxes, income taxes, excess profit tax, transportation and other taxes, besides increased municipal taxes, all of which must be added to the cost of goods. Are you still wondering why goods are not and cannot be furnished cheaply if bankruptcy is to be avoided?

The Daily Mining and Financial Record of Denver, has the following to say about freight rates:

"Irrespective of his politics, our hats are off to United States Senator Charles S. Thomas of Colorado, who arose from his seat in the upper house at Washington a few days ago and told his fellow Senators how the railroads have continually discriminated against the west. Senator Henderson of Nevada and Senator Poindexter of Washington are also to be congratulated upon their firm stand in behalf of the inter-mountain country. The Cummins railroad bill was under consideration and these Senators made a strong fight to compel the insertion of a resolution in the bill which would make the railroad companies give the west fair rates in the event that the control of the roads passed from the government to the owners. For some unexplainable reason, the Senate would not see justice done.

"Senator Thomas showed that on the shipment of mining machinery into Nevada, the rate from New York to Goldfield was greater than charged from New York by way of San Francisco to South Africa. The discrepancy, according to Senator Thomas, consisted very largely in the addition to the shipment of the freight rate from San Francisco back to Goldfield, when, as a matter of fact, the freight did not go to San Francisco at all, but went direct from New York to Goldfield, but the charge to the shipper was the rate from New York to San Francisco plus the rate back from San Francisco to Goldfield. Senator Thomas also pointed out the fact that because of railroad discrimination the people in the state of Colorado,

which is one of the greatest sugar-producing states in the country, can buy Colorado sugar at Omaha and Kansas City and ship it back to Denver and other common points cheaper than they can buy it from those who manufacture the sugar at the very doors of this city. He also showed that while Denver to Galveston is a 1,000-mile down-hill haul, the freight rates are so arranged that it costs more to ship freight down hill from Denver to Galveston than it does to haul it up hill from Galveston to Denver.

"It is indeed strange that Members of Congress will continually ignore these outrages and allow the west to be treated like a stepchild of Uncle Sam. The resolution providing for an end to this outrage was voted down in the Senate and the surprising fact stands out that even some of the western Senators voted to continue this unfair practice. Western newspapers, commercial clubs and business men should let out a howl that will be heard down in Washington and fight against the return of the railroads to the owners unless assurances are given that these unjust, indefensible and outrageous freight rates will be ended. The Senator or Congressman who does not fight these unpatriotic railroads rates should be considered an enemy or traitor to the west."

CALIFORNIA'S 1919 MINERAL PRODUCTION IS SHOWN

The statistical division of the State Mining Bureau, under the direction of Fletcher Hamilton, state mineralogist, estimates the mineral production of California for the year 1919, just closed, at a total value of approximately \$182,463,000. This is a conservative figure, and includes all products, metallic and non-metallic, being in advance of the actual figures which will be available later after the complete returns are received from the various producers. This is a decrease of approximately \$17,000,000 compared with the 1918 total, and is due to the marked drop in prices and the cessation in demand of the so-called "war minerals."

Individually, increases were made by petroleum and gold. The former, while increasing but slightly in total number of barrels, showed an increase of about \$6,000,000 in value. Gold increased approximately \$800,000 in value, indicating that this form of mining in California is already beginning to readjust itself. However, this recovery from the downward trend of the preceding three years, and particularly from the abnormal drop in the 1918 output, is the result of improved grades of ore in some of the larger lode mines, rather than from the reopening of gold properties.

Notable decreases in value are shown by: Copper, approximately \$7,600,000; potash, \$6,000,000; tungsten, \$2,770,000; quicksilver, \$1,200,000; and by chromite, lead, manganese, and zinc. Dropping from the record figures attained in the period 1916-1918, the production of chromite, potash, and of tungsten became practically nil in 1919. Shipments of manganese ores amounted to only about 50 per cent of 1918 output.

The date of publication of the final and complete report on the mineral production for the year is dependent upon the promptness of the replies from the operators. The law requires that reports must be made to the State Mining Bureau, the details of the individual returns being held confidential.

The estimated quantities and values for 1919 are tabulated as follows:

\$17,320,000	gold.
1,244,000	(1,121,000 oz.) silver.
60,000	(100 tons) tungsten concentrates.
4,237,000	(22,300,000 lb.) copper.
254,000	(4,500,000 lb.) lead.
69,000	(970,000 lb.) zinc.
1,300,000	(15,000 flasks) quicksilver.
60,000	(500 oz.) platinum.
133,000,000	(100,000,000 bbl.) petroleum.
39,000	(1,500 tons) chromite.
220,000	(11,000 tons) manganese.
480,000	(60,000 tons) magnesite.
3,500,000	(47,000,000 M cu. ft.) natural gas.
13,550,000	brick, cement, building stone, crushed rock, etc.
2,000,000	miscellaneous "industrial" minerals.
5,130,000	salines (including borax, potash, salt, soda).

\$182,463,000, Total.

Going Back to the Multiplication Table and the Golden Rule

There has been much talk in certain influential circles about settling the new problems of the nation in a new way. How would it do to make an effort first to settle the new problem in the old way—the way in which we have won success without parallel in the history of the world; for there are certain great basic principles which do not change with the changing fashions of the hour, although many seem to have wandered a great distance away from this old-fashioned belief.

Our dear old world is somewhat topsy-turvy in certain parts of its territory. Ideas and ideals, in some nations, have suffered serious dislocation. It is not a time for excessive or unnecessary experimentation; it is a time for good cart-horse sense, a time to hitch our wagon to a star, but to be equally careful to have traces sufficiently long to allow the wagon wheels to run on earth and move something that must be moved for the benefit of civilization.

Let us stop talking about new ways of solving new problems. Let us renew our allegiance to the multiplication table and the Golden Rule, recognizing that saying a thing is so doesn't make it so, when the statement issued violates the great fundamental laws of life. Let us meet the future without fear and with a manly heart, confident that in the very near future men all over the world will be playing the great game of life straight as well as strong.
— From *Com. Exchange Bank, Philadelphia, Pa.*

PERSONALS

A. B. Conklin, Chairman of the graphite section of the Alabama Chapter of the American Mining Congress, who has been spending some time in Washington in the interest of graphite producers, has returned to his home in Alabama.

Paul Armitage, of New York, was a caller at the offices of the Mining Congress in the interest of taxation matters affecting the mining industry.

Gen. John T. Barnett, Denver, Colo., is in Washington, where he is representing the oil producers in the provisions of the Leasing Bill affecting them.

John C. Howard, Salt Lake City, Utah, a director of the American Mining Congress, who has been spending several weeks in the East on business, has returned to his home.

Alex. R. Watson, Fairmont, W. Va., when recently in Washington, called at the offices of the Mining Congress and discussed the coal situation with the secretary.

John Haak, of Portland, Oregon, is in Washington on matters pertaining to the War Minerals Relief Bill.

E. A. Dickey, Secretary of the Pacific Coast Chrome Producers' Association, San Francisco, Cal., who has been in Washington since January 1 in the interest of a tariff upon chrome and the liberalization of war minerals relief measure, has returned to his home.

Nelson Franklin, Denver, Colo., who has done such excellent work in presenting tungsten matters to the Senate Finance Committee, together with Mrs. Franklin, is at the Willard.

Dr. Henry Mace Payne, of the Bertha Coal Co., Pittsburgh and New York City, spent a day in Washington during the month in the interest of export matters. Dr. Payne is chairman of the Coal Export Committee of the American Mining Congress.

T. A. Dubes of the Midwest Refining Co., has returned to Denver after spending several days in Washington and New York.

Col. Daniel B. Wentz, President of the Wentz Corporation, Philadelphia, was a caller at the offices of the American Mining Congress on January 28. Mr. Wentz is a Director of the Mining Congress.

Ross Blake, who is State Vice-President of the American Mining Congress of Arkansas, is at present in Washington, D. C., where he represents the manganese industry of the Batesville-Cushman manganese field, in national legislation.

One of the recent visitors at the headquarters of the American Mining Congress was **Sumner S. Smith**, manager of the Mining Department of the Alaskan Engineering Commission now located at Anchorage. Mr. Smith is an enthusiastic Alaska booster, but he put aside plucking wild violets on the sun-kissed hills of the Matanuska Valley long enough to sail for the United States about the middle of November for the purpose of spending two weeks in the center of national activities, Washington. Mr. Smith tells the interesting story of the development of Alaska of the agricultural possibilities, the mining developments, and the building of the Government railway which now runs two trains weekly between Seward and Talkeetna Station. The Alaskan Government mines under Mr. Smith's management are now producing about 3,500 tons of a good quality bituminous coal for the use of the Government railways, and the producing capacity will be increased as needed. The lure of the Matanuska Valley was much stronger than the lure of cold-ridden Washington at this time of the year and Mr. Smith departed on the 15th for America's much neglected bonanza lands, after explaining to his intimate friends that the valley of his adoption rarely has more than two feet of snow, and that 20 degrees below zero had no terrors for a man who could stand the penetrating atmosphere of Washington in January.

At the recent meeting of the Colorado Chapter of the American Mining Congress and the Colorado Metal Mining Association, held in the Capitol building at Denver, Colo., George E. Collins of Denver was elected governor of the State Chapter of the American Mining Congress; J. F. Welborn, Denver, first vice-governor; Charles A. Chase, Telluride, second vice-governor; George H. Stahl, Cripple Creek, third vice-governor; M. B. Tomblin, Denver, reelected secretary; A. M. Collins, Creede, treasurer; R. M. Henderson, Breckenridge; S. D. Nicholson, Leadville; C. F. Clay, Denver; Charles A. Chase, Telluride; M. Schoot, Denver; M. Kuryle, Eureka, and Nelson Franklin, Denver, directors.

George M. Taylor, Colorado Springs, was elected president of the Metal Mining Association; Jesse F. McDonald, Leadville, first vice-president; R. M. Henderson, Breckenridge, second vice-president; L. A. Ewing, Boulder, third vice-president; A. M. Collins, Creede, treasurer; and M. B. Tomblin, Denver, reelected secretary.

Among the important matters under discussion were: Increased Cost of Mining Operations, Workmen's Compensation, Oil Shale, Taxation, Blue Sky Laws, relief for Tungsten, Manganese and other War Minerals, and a solution of the Gold Problem.

Pig Iron Production

Pig-iron production for the year 1919 will total about 29,500,000 tons as compared with 38,400,000 tons in 1918, 37,860,000 in 1917, and 38,844,598 tons in 1916, showing the notable decline in output due chiefly to the labor troubles of the year.—Bureau of Mines.

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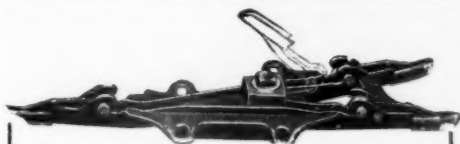
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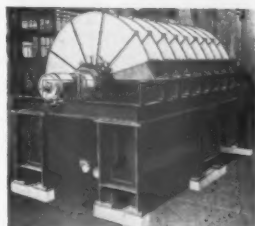
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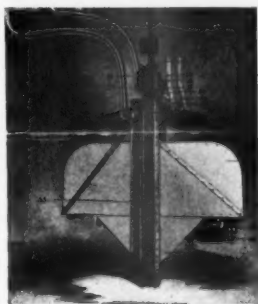
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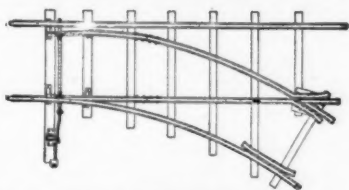
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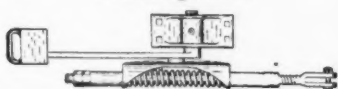
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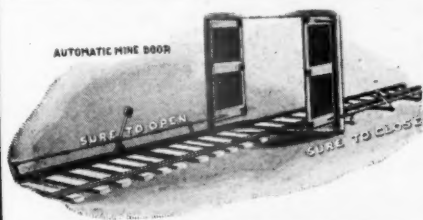
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Electric Service Supplies Co., 17th & Cambria Sts., Philadelphia, Pa.
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Marion Machine, Foundry & Supply Co., Marion, Ind.
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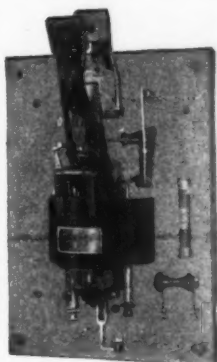
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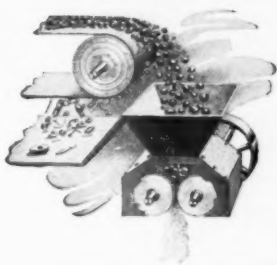
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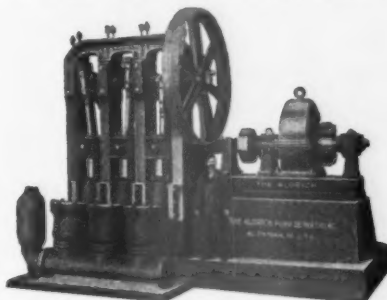


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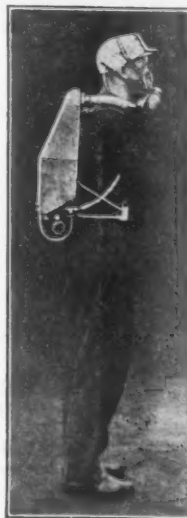
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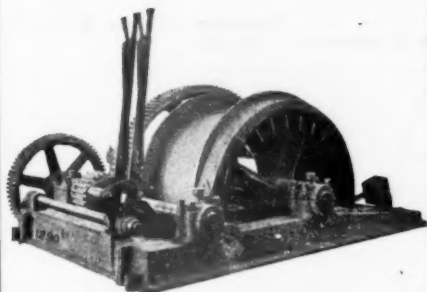
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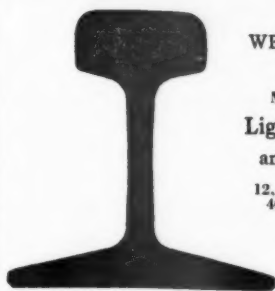
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